

# President-elect Donald Trump

# TIME



*West Palm Beach, Fla.  
Nov. 6, 2024*





## CONTENTS

### 9 The Brief

### 19 The View

### 26 How He Did It, Again

Inside the campaign that sent Donald Trump back to the White House, and America into uncharted territory  
*By Eric Cortellessa*

### 38 The Baby Question

People struggling with whether to have kids have beaten a path to the door of therapist and author Merle Bombardieri  
*By Jamie Ducharme*

### 45 TIME100 Climate

From the C-suite to the Klamath River to the farms of Malawi, these influential leaders are driving climate action in the world of business

### 69 Time Off

^  
*Election workers reviewing ballots in Denver on Nov. 5*



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**LIE OR DIE:  
SECRETS HAVE A COST**





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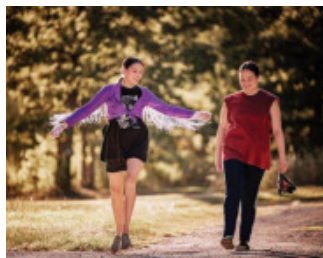
### A celebration of influence

TIME hosted a gala in Los Angeles on Oct. 24 to mark the publication of its second annual Latino Leaders list, presented by Nissan. Above, María Zardoya, lead singer of the Marías, and Josh Conway perform at the venue, Casita Hollywood; below, actors George Lopez and Camila Mendes speak about the importance of representation in Hollywood. See the full list at [time.com/latino-leaders-2024](https://time.com/latino-leaders-2024)



### Indigenous films to stream now

Film history is rife with harmful stereotypes of Native peoples. To mark November as Native American Heritage Month in the U.S., TIME spoke to Indigenous scholars and filmmakers about the movies that actually get the Indigenous experience right, like *Fancy Dance* (pictured). [time.com/native-films](https://time.com/native-films)



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### On the covers



Photograph by David Butow for TIME



Photograph by Stephen Voss for TIME

### SETTING THE RECORD STRAIGHT

In "Fortress Democracy" (Nov. 11), we misidentified the organization for which David Becker is executive director; it is the Center for Election Innovation and Research. In the same issue, in "Mel Robbins Will Make You Do It," we misstated when Robbins' mother left college; it was her sophomore year.

In addition, the Best Inventions list contained several errors: Bitkey is made from Corian; ALZPath licensed its Alzheimer's antibody to Roche, and it received Breakthrough Device status in April; the Roche HPV self-collection solution is administered in a health care setting; BeeHero sensors are placed in fields; Dsm-Firmenich is a Swiss-Dutch company, and the FDA determined Bovaer meets safety and efficacy requirements for use; and Agility calculated the return on investment for the Digit robot based on a human working for \$30 an hour.





THE  
**VAPORIZING,**  
NIGHTTIME,  
SNIFFLING,  
SNEEZING,  
COUGHING,  
ACHING,  
STUFFY HEAD,  
SORE THROAT,  
FEVER,  
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# The Brief



## BLAME GAME

BY PHILIP ELLIOTT,  
BRIAN BENNETT, AND  
CHARLOTTE ALTER

Among Democrats,  
the soul-searching  
and finger-pointing  
has begun

INSIDE

THE PROBLEM FACING  
AMERICA'S CHAIN RESTAURANTS

AI IS HELPING NATURAL-DISASTER  
RESPONSE EFFORTS

HOW TO IMPROVE  
YOUR BRAIN HEALTH

PHOTOGRAPH BY HYOUNG CHANG

**K**AMALA HARRIS HAS BEEN DEFEATED, Donald Trump is headed back to the White House, and the Democrats have begun soul-searching to determine what went so wrong in a landslide that saw the party lose ground across the nation.

There's plenty of blame to go around. Most of the finger-pointing hasn't been aimed at Harris, who ran a truncated campaign that was generally well regarded before the Election Day drubbing. Instead, some of the sharpest criticism focused on President Joe Biden for moving forward with a catastrophic re-election bid.

"The story might have been different if he had made a timely decision to step aside and allowed the party to move on," says David Axelrod, the strategist behind both of Barack Obama's presidential wins.

The frustration with Biden, many Democrats argue, should extend to members of his inner circle who shielded an 81-year-old President in physical decline. "I don't believe that Joe Biden believed he was diminished," says John Morgan, a Florida attorney and Biden donor. "Now, who may have known he was diminished were the sycophants around him in the White House."

As the extent of Harris' loss becomes clearer, the focus on her missteps is likely to grow. The Democrats didn't lose just a spate of swing states. Harris ceded territory across the political map, including in deep blue cities, and suffered a rebellion from constituencies the party has long taken for granted. A Democratic strategist with deep ties to Biden's orbit says Democrats have long known they were weak with Latino and Black men, making a major misstep of the decision by Harris' team to put so much focus on turning out women with appeals to protect reproductive rights.

An issue the party saw as a potent political weapon to turn out women may have also turned off men of color. Latino voters who said abortion should be legal in most cases backed Biden by 63% to 34%; four years later, Harris won by 9 percentage points on that question with Latinos. Harris lagged Biden by 15 percentage points on the same question with Black voters.

While the initial criticisms of Harris were fairly mild, some party strategists saw in her cautious campaign a series of strategic blunders. Maybe Harris wasted too much money on digital ads. Maybe she should have distanced herself from her boss more explicitly. Or maybe she was all but doomed from the start. "I think she ran the best campaign anyone in her position possibly could have.

But that doesn't mean she was the right person," says former Democratic Congressman Tom Malinowski. "In hindsight, I think there is a strong argument for having had an open competitive process in place" to replace Biden on the ticket, Malinowski says.

The blame game is likely to expand to the groups the party relies on to turn out the vote. Take, for instance, NextGen America, the party's biggest youth-vote machine, which spent almost \$56 million, hired 256 staffers, and recruited almost 30,000 volunteers. It was a massive undertaking—and yet Harris won just 55% of voters under the age of 30, lagging Biden's performance by 5 points. Another group, Swing Left, raised \$25 million from red-state Democrats for on-the-brink districts, knocked on almost 350,000 battleground doors in the final week-end, and placed more than a half-million calls in that final push. The get-out-the-vote machine didn't work.

## There's plenty of blame to go around. But most finger-pointing hasn't been aimed at Harris

**TO SOME OBSERVERS**, focusing on campaign mechanics misses the bigger picture. "No incumbent party has ever won with a President with a 40% approval rating or under," says Axelrod. "No party has won with people's attitudes about the economy what they were."

Harris, Axelrod argues, had the added challenge of running while the nation is still suffering from post-pandemic PTSD, which helped Republicans tap into antiestablishment rage that has swept out a wave of incumbents around the globe.

"These forces were so large that I'm not sure where there are strategic or tactical decisions that could have changed the outcome," says Axelrod. "At the end of the day, being the VP of an Administration that people wanted to fire may have been an insurmountable obstacle."

Yet even considering world trends and economic cycles, some saw in the verdict an unmistakable sign of misogyny. To this group, it's hard to ignore that Trump has now won twice against female opponents, while losing to an old white man. Rodell Mollineau, a former senior aide to the late Democratic Senate leader Harry Reid, notes that despite his overwhelming victory, Trump was an unpopular candidate himself. "They picked him over a Black woman," Mollineau says. "This is a tough pill to swallow."

It's a point that hasn't been lost on Biden's shrinking circle of defenders. "Everyone who destroyed Biden and pushed him out got the race they demanded," says a Democratic state committee member in Pennsylvania. "There was a choice: the only person that ever beat Trump, or a gigantic unknown."





## Spanish aftermath

A man navigates the debris in a flooded street in Valencia, Spain, after heavy rainfall led to deadly flash floods on Oct. 30. At least 218 people were killed, and officials searched underground parking garages for more bodies. Angry residents criticized officials for tardy warnings, and visiting King Felipe was pelted with mud and eggs.

### THE BULLETIN

## The AI tools being built for African teachers and farmers

A GENERATIVE AI CHATBOT IN Malawi answers questions about crops and livestock in the native language of local farmers. The nonprofit behind it is preparing similar AI-based solutions for other disadvantaged communities. In February, Opportunity International ran an acceleration incubator for humanitarian workers across the world to pitch AI-based ideas and then develop them alongside mentors from institutions like Microsoft and Amazon. On Oct. 30, Opportunity announced the winning entrants; each will receive about \$150,000 in funding to pilot the free-to-use apps in their communities, with the goal of reaching millions of people within two years.

**FARM HELP** The first app is a farming project designed to take in

personalized data and give specific farming advice—like what seeds to plant or how much fertilizer to use and when—based on climate, a farmer’s acreage, and crop history. Co-founder Rebecca Nakacwa, based in Uganda, says that the app’s ability to understand climate patterns in real time is crucial. “Farmers told us their topmost problem is climate: finding a solution to how to work with the different climate changes,” she says. “With AI, this is achievable.”

**LESSON PLANNING** Another winner helps teachers develop lesson plans tailored to their students. Founder Lordina Omanhene-Gyimah taught in a rural school in Ghana, and found that teachers had little instruction and faced an acute lack of resources and

knowledge about how to cater to classrooms of students of different ages and learning styles. Her app allows teachers to input information about students’ learning styles, and then creates lesson plans based on the national school curriculum.

**SCHOOL ADMINISTRATION** The third app was designed to help school owners with aspects of development like teacher recruitment, marketing, and behavioral management. Anne Njine, a former Kenyan teacher, hopes that the app will be a “partner in the pocket for school leaders, to give them real-time solutions and ideas.” Opportunity says that the app is ready to be rolled out to 20,000 schools, potentially reaching 6 million students.

—ANDREW R. CHOW

## GOOD QUESTION

## Why are sit-down chain restaurants struggling?

BY ALANA SEMUELS

RED LOBSTER FILED FOR BANKRUPTCY IN MAY. TGI FRIDAYS closed nearly 50 locations abruptly in October, then filed for bankruptcy in early November. Hooters shut down dozens of stores in June, while Buca di Beppo declared bankruptcy in August. Even budget standby Denny's said in October that it would close about 150 stores in the next two years, citing "choppy economic conditions" and reluctance of cost-conscious consumers.

Sit-down chain restaurants may be the quintessential American business, beginning with the expansion of Howard Johnson's after World War II as families got in the car and started to travel. But the economy is challenging the business model. Although inflation is slowing, reticent consumers are eating more at home or at lower-cost fast-food restaurants, where the average check is \$7.92, about half the average check at a sit-down restaurant, according to CREST, a database from consumer-insight firm Circana. Many sit-down (or full-service) chain restaurants came into this economic climate deep in debt, and are now struggling to stay afloat.

"A whole lot of these companies are finding their sales aren't turning out to be as strong as expected," says Jim Sanderson, a restaurant-industry analyst for North-coast Research. Customer traffic at full-service restaurants in the third quarter of 2024 was down 3% from a year ago and is 17% below the same period in 2019, according to CREST.

Part of the problem is labor costs are continuing to grow but inflation-weary consumers aren't willing to pay more for restaurant food, says Sanderson. Nearly all restaurant owners surveyed by the National Restaurant Association this year said higher labor costs were "an issue" for their business. Restaurants used to spend 30% to 35% of gross sales on labor. Now many spend 40% to 45%, according to Dave Foss, co-founder of hospitality group Maverick Theory.

Another issue is that many of these restaurants are now owned by private-equity groups that borrowed a lot of money for their acquisitions and are not seeing the cash flow they needed to come out even. TGI Fridays, Red Lobster, Hooters of America, and P.F. Chang's were all purchased by private-equity groups in the past decade.

TGI Fridays has 58% fewer restaurants than it did in 2019, and Hooters had 23% fewer, according to data from industry research firm Technomic.

"If you combine restaurant margins being under pressure with a tenuous financial situation, all you need is one or two things to go wrong," says Sara Senatore, senior analyst covering restaurants at Bank of America. Chain restaurants used to be pretty stable businesses, so private-equity owners had a good idea of what costs and sales would be, she says, but the pandemic made the business much more volatile.

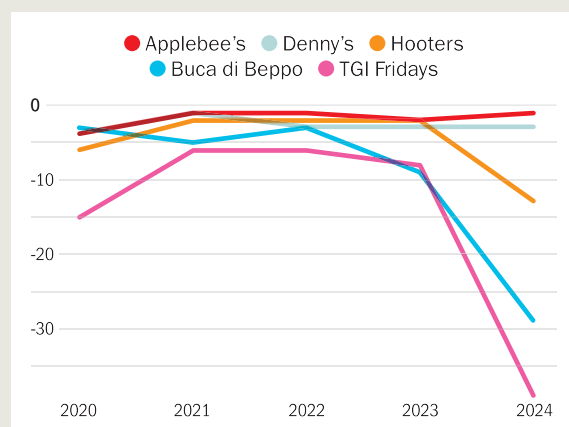
**SOME RESTAURANTS ARE TRYING** to earn back business by offering huge discounts on meals or all-you-can-eat specials, which just cuts into their bottom line even more, says Dan Rowe, CEO and founder of Fransmart, a franchise-development group. "It's not sustainable," he says. Red Lobster famously offered an all-you-can-eat shrimp deal before it filed for bankruptcy.

There is one success story, analysts say: Chili's, owned by the public company Brinker International, which got a new CEO in 2022. The company changed its menu, removing many items and focusing on a few staples, including burgers, fajitas, and margaritas. It got much better at social media and

advertising so that when customers came into the restaurant, they were pleasantly surprised at the new and improved menu. The company also launched a "barbell" strategy in which it offered big deals to lure customers and premium products to get them to spend money. Chili's also reinvested in labor, making sure restaurants were fully staffed so that guests wouldn't face long wait times. In the most recent quarter, Chili's sales grew 14%.

"We're starting to see a few glimmers of hope," Sanderson says, "with some restaurants finding there is a way to re-engage customers." □

**FULL-SERVICE CHAINS ARE STRUGGLING**  
Percentage change in number of locations from previous year



SOURCE: TECHNICOM

**'All you need is one or two things to go wrong.'**

—SARA SENATORE,  
ANALYST



**FIRED****Israel's Defense Minister Yoav Gallant**

by Prime Minister Benjamin Netanyahu on Nov. 5, following disputes between the two over Israel's military actions in Gaza; Gallant had advocated for a cease-fire deal.

**CONVICTED**

Brett Hankison, a former Kentucky detective who is white, on Nov. 1, by a federal jury, **of using excessive force on Breonna Taylor**, a Black woman who died in 2020 during a botched police raid. Another former detective earlier pleaded guilty to federal charges for helping to falsify the search warrant used for the raid.

**ERUPTED**

**Mount Lewotobi Laki Laki** in Indonesia on Nov. 4, killing at least 10 people. Ash struck nearby towns, burning down homes.

**ELECTED**

**Kemi Badenoch**, as the new leader of the U.K.'s Conservative Party, on Nov. 2, making her the first Black woman to head a major British political party.

**DIED**

Actor **Teri Garr**, who was nominated for an Oscar for her role in *Tootsie*, on Oct. 29 at 79.

**DIED**

## Quincy Jones

### Music titan

QUINCY JONES, ONE OF THE most important drivers of 20th century pop culture, died on Nov. 3 at 91. A music producer, composer, and executive, Jones served as the connective tissue between many eras and styles of music, from Ella Fitzgerald to Frank Sinatra, Michael Jackson to Amy Winehouse. With his golden ear, inexhaustible work ethic, and devotion to both music history and new technologies, he defined the center of American pop music for decades.

Jones cut his teeth in the jazz world, playing trumpet with Ray Charles when they were teenagers in Seattle. He was soon arranging songs for Sinatra and Count Basie, and branched out into pop,

shepherding young artists like Lesley Gore to stardom. He also found a home in the film world, composing scores for movies like *In Cold Blood* (1967) and *The Color Purple* (1985). Jones broke plenty of racial barriers along the way: He was the first Black vice president of a white-owned record label, and in 1971, the first Black musical director of the Oscars.

Jones hit his commercial peak in his partnership with Michael Jackson. When the former child idol was struggling to pivot to a career as an adult, Jones helped him build a new sound: a sleek reimagining of disco for *Off the Wall* (1979). But the album

**Jones defined the center of American pop for decades**



Jones, pictured in 1980, delivered hits across genres and decades

was still largely snubbed at the Grammys, reflecting the music industry's rigid conceptions of race and genre.

For their next project, Jones and Jackson wanted to create an album chock-full of undeniable hits that would resonate with different types of audiences, so that no gatekeepers could deny their greatness. Thus *Thriller* was born. Jones showed off his wide-ranging musical influences, from John Coltrane (on the track "Baby Be Mine") to Cameroonian artist Manu Dibango (on "Wanna Be Startin' Somethin'") to Van Halen ("Beat It"). He employed cutting-edge synthesizers and drum machines, working feverishly to perfect each sound for days on end. Audiences loved it: a record seven of its songs hit the Top 10. *Thriller* is now the best-selling album of all time, and remains a towering pillar of culture and a template for ambitious pop songcraft.

Jones' other achievements include spearheading "We Are the World," executive-producing *The Fresh Prince of Bel Air*, and co-founding the hip-hop magazine *Vibe*. His songs have been sampled countless times, and he won the third most Grammys of any artist. Tributes poured in after his death, with Barack Obama writing, "By building a career that took him from the streets of Chicago to the heights of Hollywood, Quincy paved the way for generations of Black executives to leave their mark on the entertainment business."

—ANDREW R. CHOW





◀ AI was used to identify damage in Adiyaman, Turkey, after last year's earthquake

TECH

## Using AI for natural-disaster responses

BY HARRY BOOTH AND THARIN PILLAY

THE NUMBER OF PEOPLE LIVING IN URBAN AREAS HAS tripled in the past 50 years, meaning that when a major natural disaster like an earthquake strikes a city, more lives are in danger. Meanwhile, the strength and frequency of extreme weather events has increased—a trend set to continue as the climate warms. That is spurring efforts around the world to develop a new generation of earthquake-monitoring and climate-forecasting systems to make detecting and responding to disasters quicker, cheaper, and more accurate than ever.

On Nov. 6, at the Barcelona Supercomputing Center in Spain, the Global Initiative on Resilience to Natural Hazards Through AI Solutions met for the first time. The new U.N. initiative aims to guide governments, organizations, and communities in using AI for disaster management.

The initiative builds on nearly four years of groundwork laid by the International Telecommunications Union, the World Meteorological Organization (WMO), and the U.N. Environment Programme, which in early 2021 collectively convened a focus group to begin developing best practices for AI use in disaster management. These include enhancing data collection, improving forecasting, and streamlining communications.

“What I find exciting is, for one type of hazard, there are so many different ways that AI can be applied, and this creates a lot of opportunities,” says Monique Kuglitsch, who chaired the focus group. Take hurricanes, for example: In 2023, researchers showed AI could help policymakers identify the best places to put traffic sensors to detect road blockages after tropical storms in Tallahassee, Fla. And in October, meteorologists used AI weather-forecasting models to accurately predict that Hurricane Milton would land near

**‘There are so many different ways that AI can be applied!’**

—MONIQUE KUGLITSCH, CHAIR, FOCUS GROUP ON AI FOR NATURAL-DISASTER MANAGEMENT

Siesta Key, Florida. AI is also being used to alert members of the public more efficiently. Last year, the National Weather Service announced a partnership with AI translation company Lilt to help deliver forecasts in Spanish and simplified Chinese, which it says can reduce the time to translate a hurricane warning from an hour to 10 minutes.

Besides helping communities prepare for disasters, AI is being used to coordinate response efforts. Following Hurricanes Milton and Ian, the nonprofit GiveDirectly used Google’s machine-learning models to analyze pre- and poststorm satellite images to identify the worst-affected areas and prioritize cash grants accordingly. Last year AI analysis of aerial images was deployed in cities like Quelimane, Mozambique, after Cyclone Freddy and Adiyaman, Turkey, after a 7.8-magnitude earthquake, to aid response efforts.

Operating early-warning systems is primarily a governmental responsibility, but AI climate modeling—and, to a lesser extent, earthquake detection—has become a burgeoning private industry. Startup SeismicAI says it’s working with the civil-protection agencies in the Mexican states of Guerrero and Jalisco to deploy an AI-enhanced network of sensors, which would detect earthquakes in real time. Tech giants Google, Nvidia, and Huawei are partnering with European forecasters and say their AI-driven models can generate accurate medium-term forecasts thousands of times more quickly than traditional models, while being less computationally intensive. And in September, IBM partnered with NASA to release a general-purpose open-source model that can be used for various climate-modeling cases, and which runs on a desktop.

**AI-DRIVEN MODELS ARE** typically only as good as the data they are trained on, which can be a limiting factor in some places. “When you’re in a really



high-stakes situation, like a disaster, you need to be able to rely on the model output,” says Kuglitsch. Poorer regions—often on the front lines of climate-related disasters—typically have fewer and worse-maintained weather sensors, for example, creating gaps in meteorological data. AI systems trained on this skewed data can be less accurate in the places most vulnerable to disasters. And unlike physics-based models, which follow set rules, as AI models become more complex, they increasingly operate as sophisticated “black boxes,” where the path from input to output becomes less transparent. The U.N. initiative’s focus is on developing guidelines for using AI responsibly. Kuglitsch says standards could, for example, encourage developers to disclose a model’s limitations or ensure systems work across regional boundaries.

Meanwhile, private companies like Tomorrow.io are seeking to plug these gaps by collecting their own data. The AI weather-forecasting startup has launched satellites with radar and other meteorological sensors to collect data from regions that lack ground-based sensors, which it combines with historical data to train its models. Tomorrow.io’s technology is being used by New England cities including Boston to help city officials decide when to salt the roads ahead of snowfall. It is also used by Uber and Delta Air Lines.

Another U.N. initiative, the Systematic Observations Financing Facility (SOFF), also aims to close the weather data gap by providing financing and technical assistance in poorer countries. Johan Stander, director of services for the WMO, one of SOFF’s partners, says the WMO is working with private AI developers including Google and Microsoft, but stresses the importance of not handing off too much responsibility to AI systems.

“You can’t go to a machine and say, ‘OK, you were wrong. Answer me, what’s going on?’ You still need somebody to take that ownership,” he says. He sees private companies’ role as “supporting the national [meteorological] services, instead of trying to take them over.”

## CONSTRUCTION

# Turning waste into buildings

BY LILLYGOL SEDAGHAT  
AND CORY HOWELL HAMADA

Insect shells, rice husks, water bottles, and bamboo charcoal might not be the first things that come to mind when you think of high-performance building products. But Taiwanese upcycling company Miniwiz is using them to create just that. “We take leftover construction waste, leftover fiber waste, leftover plastic or packaging waste, and turn that into a building material you can use for another 30 years,” says CEO Arthur Huang.

Carbon emissions from the built environment include “operational” carbon generated through uses like lighting and ventilation, and “embodied” or “embedded” carbon, created during the process of material extraction, manufacturing, and transportation. Embedded carbon is expected to contribute to nearly half of new construction emissions between 2020 and 2050.

“We solve the embedded-carbon footprint issue by very dumb logic,” Huang says. “You just use the carbon you’ve already produced.”

Mining and extraction of materials for the modern construction industry is carbon-intensive, but Huang believes we can eliminate the carbon released by new material production by using things we would otherwise throw away.

Miniwiz has invented processes to turn over 1,200 kinds of local waste into building products that can function as everything from brick or wall panels to tiles and air filters; since its inception in 2005, Miniwiz has built a number of large-scale structures including the earthquake- and fire-resistant Taipei EcoARK, composed of over 1.5 million PET bottles, and Anything Butts, a

modular structure made from recycled cigarette butts. Recent projects like the wall fabric in Hong Kong’s AIRSIDE shopping mall built in 2023 reduce carbon emissions by over 70% compared with traditional materials, according to Miniwiz’s CO<sub>2</sub> Emissions Summary.

Concrete, one of the most commonly used traditional construction materials, contributes up to 8% of total annual emissions. Wen-yi Kuo, founder of material-development company LOTOS, works on reducing emissions by extending the life of concrete, and ultimately hopes to replace the material with local waste-based alternatives.

Kuo has developed a product to help tackle the toll humidity can take on buildings in Taiwan. The natural stucco, made from waste silt dredged from Taiwan’s water reservoirs, can replace cement-based alternatives. The material prevents water damage to concrete buildings and can be added to cement mortar as a waterproofing agent.

He went on to co-create C-Slurry, a concrete substitute that uses indus-

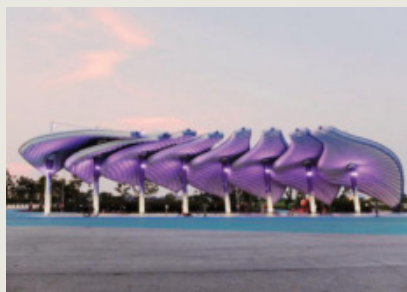
trial waste like blast-furnace slag from steel-making instead of cement as a binder, combining it with other forms of local waste like oyster shells and demolished red brick to invent alternative low-carbon building materials.

“If we want to

be lower-carbon and circular, most of the materials need to be local,” says Kuo. “This has the added benefit of reducing carbon emissions from shipping and transportation.”

Persuading customers to try something new in Taiwan’s “conservative” construction industry is a challenge, Kuo says. “We introduce the new technology to help solve people’s problems, and build trust from there.”

“In the end it comes down to whether someone has the consciousness and they’re willing to pay for this,” Miniwiz’s Huang adds. “So we are using technology to find a way to produce at half the price, twice as good.”



Miniwiz used recycled water bottles to build the Sky-Wing Bike Pavilion in Thailand

## 5 ways to improve your brain health every day

BY ANGELA HAUPT

TAKING CARE OF YOUR COGNITIVE health ought to be—well, a no-brainer. According to a survey published in March, 87% of Americans are concerned about age-related memory loss and a decline in brain function as they grow older, yet only 32% believe they can take action to help control that trajectory.

“All of us want to be cognitively intact for as long as possible,” says Dr. Seemant Chaturvedi, a neurologist and stroke specialist at the University of Maryland Medical Center. The good news, he adds, is that “there are definitely risk factors that can be modified.” Changing our lifestyle habits can go a long way: drinking excessive amounts of alcohol, for example, can damage the parts of the brain involved in important functions like memory, decisionmaking, impulse control, and attention. Smoking is similarly perilous. It can lead to cognitive decline and dementia, while increasing the risk of stroke.

Prioritizing healthy behaviors like exercising and eating a nutritious diet can increase the likelihood that when we reach our 70s and 80s, we’re still able to summon important memories, drive a car, and engage in a wide variety of activities, Chaturvedi says. And there’s no such thing as “too young” to start taking these steps. “Even if you’re in your 20s, what you’re doing now will help you maintain brain health later in life,” he says.

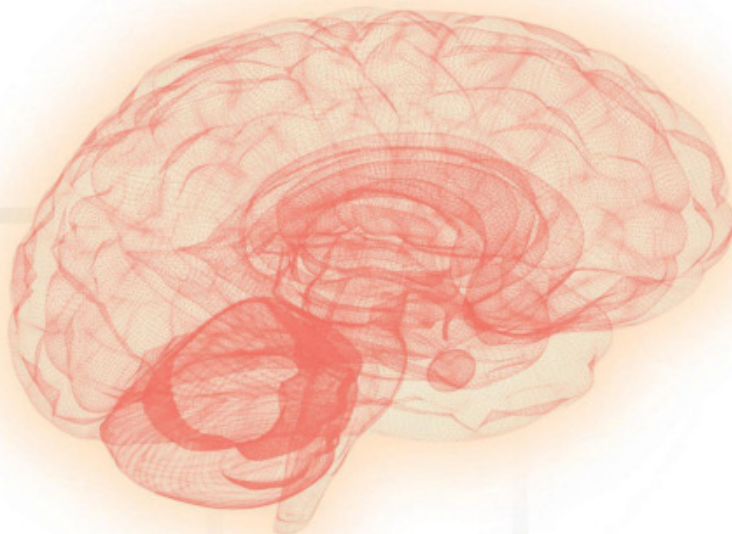
With that in mind, we asked four neurologists what we should all do every day for better brain health.

### Manage your chronic illnesses

If you have high blood pressure, high cholesterol, or diabetes, it’s essential to make sure it’s under control. Each condition can “damage the blood vessels in the brain and increase the risk of stroke and dementia,” while diminishing cognitive function, Chaturvedi says. In one study, for example, people who had hypertension in their 40s to early 60s had a 6.5% steeper decline in cognitive skills in their 70s, 80s, and 90s, compared with those with normal blood pressure. That’s why it’s important to get your numbers checked regularly, and to work with your doctor to establish a treatment regimen.

### Exercise for 30 minutes

Your entire body will benefit if you work out at least a few days a week—and that includes your brain. Research suggests that exercising improves cognitive processes and memory, while increasing the thickness of your cerebral cortex, which is responsible for tasks like language, thinking, and emotions. “We’re learning more and more about the benefits of regular exercise for brain health,” Chaturvedi says. “Even in patients who have mild dementia, it’s recommended they engage in exercise three to five times a week.”



### Eat like you’re vacationing on the Italian coast

Dr. Carolyn Fredericks, an assistant professor of neurology at Yale School of Medicine, always recommends her patients follow a Mediterranean diet, which emphasizes fruits, veggies, whole grains, fish, nuts, seeds, and healthy fats. “We’ve tried over the years to find the secret ingredient that makes the Mediterranean diet work,” she says. “Like, could it be the omega-3s in the fish, or the vitamin E in the nuts?” But what appears to be most impactful, she says, is the style of eating and emphasis on whole foods.

### Challenge your mind

People often ask Dr. Roy Hamilton what kind of mental stimulation is best. Should they put together puzzles or play Sudoku every day? What about video games? Rather than focusing on one pursuit, Hamilton recommends curating a “diet of intellectual activities.” He compares it to asking a nutritionist what you should eat for a healthy diet: the answer wouldn’t be carrots, more carrots, and only carrots. Make it a point to exercise your brain in a variety of ways, just as you feast on lots of different snacks and meals.

### Rest up

Not getting enough sleep is a key risk factor for dementia, says Dr. Augusto Miravalle, a neurologist at Rush University Medical Center. Research suggests that people in their 50s and 60s who get six hours of sleep or less per night are 30% more likely to be diagnosed with dementia than those who log at least seven hours. So what should you do if you lie awake at night counting sheep? Miravalle suggests improving your sleep hygiene by taking steps like avoiding caffeine and alcohol in the evening, limiting naps, and putting away electronics before bed.





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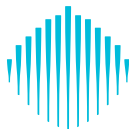
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# The View

NATION

## AMERICA'S ANIMAL PROBLEM

BY PETER SINGER

Imagine that you are going to be reincarnated as a domesticated animal, and you can choose whether to be reincarnated in the U.S. or in Spain. Which country would you pick? My hunch is that many of you will think that if you choose Spain, there's a chance you might be a bull raised to die in a bullfight, and so it is better to pick the U.S. and avoid such a fate. But that would be an unwise assumption. ▶

INSIDE

THE RUSSIAN SHADOW OVER  
TWO ELECTIONS

THE REASON SOME PEOPLE ARE  
DOUBLING UP ON COVID-19 SHOTS

WHAT THE PELICOT TRIAL  
ASKS ABOUT MEN

The cruel and bloody ritual of bullfighting does mean that each year an estimated 35,000 bulls die a horrendous death. But, overall, animals in Spain have better lives than those in the U.S.

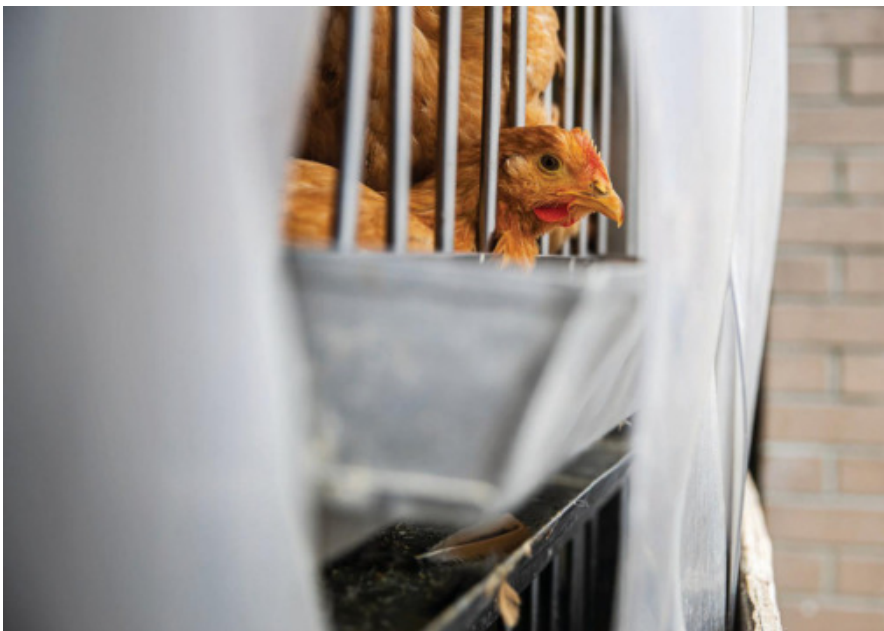
Take, for instance, the matter of egg-laying hens. Around 230 million of them in the U.S.—almost 60% of the country's hen population—are crammed into bare wire cages that do not allow them enough space to fully stretch their wings. In Spain, keeping hens in such conditions is illegal, and the nation's 46 million hens have almost twice the space. They also have access to a nest, perching space, and litter to allow pecking and scratching. None of those enrichments are to be found in U.S. cages.

These hens spend a full year in their cages, whereas it takes about 20 minutes for each bull to die in a Spanish bullfight. So it is reasonable to conclude that U.S. cages cause more suffering to hens than bullfights do to bulls, given the time and conditions spent in captivity. And because there are more than 1,000 times as many hens in Spain as there are bulls bred to die in bullfights, a randomly selected domesticated animal is more likely to be a hen, and it will have a much better life in Spain than in the U.S.

Something similar holds for pigs, especially the mothers of the pigs that are reared and killed for pork, ham, or bacon. There are around 6 million of these mother pigs in the U.S., and about 75% of them spend the entire 16 weeks of their pregnancies in stalls too narrow for them to turn around, and too short for them to walk more than a step forward or backward. Again, in Spain keeping pigs this way is illegal.

Even more gruesome are the methods used in the U.S. to kill millions of chickens and turkeys when bird flu is detected on a factory farm. Often, the birds are killed by shutting off the ventilation to the shed and bringing in heaters, so that after an hour or two of heat in excess of 104°F, they die of heatstroke. In Spain, heating birds to death is not permitted.

But it's not just about the U.S. vs. Spain. The laws that protect animals in Spain apply to all 27 countries that make up the E.U. The U.K., though



*Chickens crammed together in a cage at a live-animal market in New York City in 2020*

no longer a member of the bloc, continues to require standards of animal welfare similar to those of the E.U.

**WHY DOES THE U.S. LAG** so far behind? One view is that Americans are still influenced by a Wild West mentality that tolerates the rough handling of animals. Supporters of that view point to the rodeo, which, like the bullfight, entertains spectators by mistreating animals. People who find it entertaining to watch frightened young calves lassoed by a rope that chokes them and then drags them to the ground are unlikely to be concerned about the suffering of pigs or chickens.

Yet when Americans can vote for laws that give farmed animals more space to move around, they do. That happened with ballot initiatives in Florida in 2002, Arizona in 2006, California in 2008, Massachusetts in 2016, and California again in 2018.

So I suggest what differs is not that Americans care less about animals, but that the U.S. political system is less democratic than Europe's parliamentary system. In most parliamentary democracies, political parties are stronger and lawmakers do not need to raise large sums of money to get

re-elected. Money and lobbying have far greater influence in U.S. politics.

The U.S. congressional committee system also disempowers the electorate in a way that cannot happen in a parliamentary democracy. In the U.S., agriculture committees in both state and federal legislatures are usually made up of lawmakers representing rural districts, and they effectively have a veto on farmed-animal legislation. They often receive major donations from factory-farm operators. In states without citizen-initiated ballots, only tiny Rhode Island has farmed-animal legislation comparable to Europe's. At the federal level, there are no laws that even attempt to regulate the conditions in which farmed animals are kept.

Most Americans care about animals and would like their country to be a leader in protecting animals from unnecessary suffering. I hope that people who learn the true situation seek to change it.

*Singer is professor emeritus of bioethics at Princeton University and author of many books. His latest, Consider the Turkey, was published by Princeton University Press in October*



## Russia's long shadow across Eastern European elections



WITH SO MUCH focus on elections in the U.S., it's easy to miss the political news from two countries that remain in Russia's long shadow. In Georgia and Moldova, two former Soviet republics, voters have recently cast ballots amid accusations that Russian interference helped shape the outcome in both countries.

In Georgia, the Georgian Dream–Democratic Georgia bloc declared victory in the country's Oct. 26 parliamentary elections with nearly 55% of the vote. Four separate opposition factions rejected the results with charges that strong backing from Vladimir Putin had helped the ruling party steal an election they claim was “blatantly rigged.”

In fact, exit surveys conducted by Western agencies Edison Research and HarrisX for opposition-aligned TV stations estimated the ruling party had won just 42% of the vote. Western election observers said the elections were plagued by distribution of premarked ballots, the removal of observers from polling stations, breaches of voting confidentiality, ballot stuffing, and intimidation of some voters at polling stations.

The central issue in this election was the country's path to membership in the European Union. Opinion surveys suggest about 80% of Georgians want their country to join the E.U. The ruling Georgian Dream Party claims that it too supports this goal, but the opposition

has accused the government of pro-Kremlin policies, including a law that labels Western NGOs as “foreign agents.”

That move puts E.U. accession talks in the deep freeze. Georgia's President, largely a figurehead position, referred to the election interference as a “Russian special operation,” a jab at the euphemism Putin uses to sell his country's war in Ukraine. Large numbers of

pro-Russian Party of Socialists.

Here, too, Russia faces accusations of meddling. One official in Sandu's government charged the Kremlin with “massive interference” in the election, and a statement from the European Commission and the E.U.'s top diplomat congratulated Sandu on overcoming “unprecedented interference by Russia.” According to a White House statement released Nov. 4, President Biden

sees Russia's hand at work in the country's elections as well. “For months, Russia sought to undermine Moldova's democratic institutions and election processes,” Biden said. “But Russia failed.”

Initial results showed that Stoianoglo had won the votes of most of the 3 million Moldovans living inside the country's borders. He scored particularly well with rural and older voters. But an overwhelming majority of ballots from the estimated 1.2 million Moldovans living abroad, as well as younger and urban vot-

ers, accounted for the scale of Sandu's win. Moldova's territory includes the breakaway pro-Russian province of Transnistria, which pro-Western politicians in the country say is a territorial foothold the Kremlin might one day use to try to pull Moldova back into Russia's orbit.

The ongoing Russian war in Ukraine has only added urgency for those in Georgia and Moldova who have called for years for a European future for their countries, which spent decades inside the Soviet Union. For both, Russia's gravitational pull remains strong. □



*Protesters wave E.U. and Georgian flags in Tbilisi on Nov. 4, during a rally against alleged election violations*

Georgians have taken to the streets to protest the election outcome, but the opposition has few options to continue the fight for now.

**IN MOLDOVA, A COUNTRY** nestled between larger neighbors Ukraine and Romania, Maia Sandu claimed victory on Nov. 3, giving her a second term as President. But unlike the current government in Georgia, Sandu won with a strongly pro-E.U. platform. She defeated opposition leader Alexandr Stoianoglo, who ran on calls for closer ties with Moscow and support from the



## Health Matters

### By Alice Park

SENIOR HEALTH CORRESPONDENT

COVID-19 MAY NOT BE A PUBLIC-health emergency anymore, but you still need your yearly shot. In fact, it seems to peak about twice a year: once during the traditional respiratory-disease season in the fall and winter, and once during summer. For that reason, the U.S. Centers for Disease Control and Prevention (CDC) now recommends that people in certain groups receive not one but two updated COVID-19 vaccines, spaced six months apart.

The advice follows a summer COVID-19 surge that led to more hospitalizations among the most vulnerable Americans—people 65 and older and those with weakened immune systems. For them, the CDC now recommends a second dose. While COVID-19 rates are currently low, health experts are concerned they could spike again during the holiday season, when people travel more and gather in larger groups. The guidance went a step further for people who are immunocompromised because of conditions like cancer; they can receive three or more doses a year, depending on how weakened their immune systems are and their potential exposure to COVID-19.

“What we have seen over time is that as more and more of the population has immunity, the most vulnerable individuals are starting to narrow down,” says Dr. Yvonne Maldonado, professor of global health and infectious diseases at Stanford University and a member of the committee that advised the CDC on the decision. “We know at this point that 70% of hospitalizations now in the U.S. for COVID-19 are among people 65 and older, and that 50% occur in those 75 and older. So if we address COVID in those populations, we are looking at



*Seniors and immunocompromised people should get another COVID-19 vaccine dose*

potentially reducing 70% of the risk of hospitalization from the disease in this country right now.”

**DATA SHOW THAT** the immunity generated by the vaccines wanes after four to six months, so the additional dose should help keep older people protected throughout the year and lower their chances of becoming severely ill with COVID-19.

While the latest vaccine does not target the newer variants that are causing most of the current infections, experts say that it should still provide adequate protection. The current mRNA vaccines from Moderna and Pfizer-BioNTech target the KP.2 variant, and the Novavax vaccine targets the JN.1 variant—neither of which are the dominant version circulating in the U.S. right now. According to the latest CDC estimates, the KP.3.1.1 variant is causing nearly 60% of new COVID-19 infections, and the XEC strain is rapidly becoming more common, responsible for 10% of new cases. These newer variants appear to spread more easily among people, although there isn't any evidence yet showing they could lead to more serious disease. That's why boosting immunity with another dose for those most vulnerable to COVID-19 complications could provide additional protection as their chances of getting infected potentially increase.

The current vaccine remains

effective against these variants because KP.2 and JN.1 are still related to KP.3.1.1, since all of them are Omicron subvariants, says Dr. Steven Furr, board chair of the American Academy of Family Physicians. “I tell [my patients] that the vaccine does decrease hospitalizations and risk of death,” he says. “They still might get COVID, but they are much less likely to get it if they are vaccinated—and if they do get it, it's less likely to be severe.” That's especially true for older people and people with weaker immune systems. “If you are diabetic or hypertensive, COVID could be enough to tip you over to getting pneumonia, getting really sick and dehydrated,” Furr says. “It only takes one illness to tip your body over to more morbidity and mortality.”

It's just as important to understand what the vaccines cannot do. “The point of [vaccination] has never been to stop all infections,” says Maldonado. “We've never had the aim of stopping transmission and all infections. The idea was to stop hospitalizations and stop deaths.”

Vaccines have essentially accomplished that for most people, and adding an additional dose for the remaining groups who are most vulnerable could reduce hospitalizations and death even further.



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SOCIETY

# The many horrors of the Pelicot rape trial

BY BELINDA LUSCOMBE

THE TRIAL OF DOMINIQUE PELICOT, THE MAN IN THE South of France who pleaded guilty in September to charges of secretly drugging his wife of 50 years, Gisèle, and, over the course of about a decade, filming dozens of men as they had sex with her while she was sedated, would have been disturbing enough just as the story of an epically vile husband. But perhaps there are even more puzzling and horrifying questions about the other men. Who were they? How could they? How can there be so many men willing to rape an unconscious woman?

Over the past five weeks of the trial, which began on Sept. 2 in Avignon, the five judges—and aghast onlookers from around the world—have had the chance to hear from several of Dominique Pelicot's 50 co-defendants, most of whom have been charged with aggravated rape. It would be comforting to think that there are more psychopaths and sexual deviants in that part of France than elsewhere, but it does not seem to be the case.

Clearly, Dominique Pelicot, 71, is a deranged, deceptive, and dangerous human. But most of the accused are unremarkable men with no criminal record who say they are not guilty of rape. Many have offered similar rationales for their behavior: they didn't think it was nonconsensual. They thought they had license to have sex with Mrs. Pelicot, because they had permission from Mr. Pelicot.

One of the defendants, a 43-year-old carpenter, who went to the Pelicots' home in October 2019 and again in January 2020, told the judges that after Dominique Pelicot told him Gisèle, now 72, was a consenting partner in a sex game, he hadn't given the matter of her willingness much more consideration. He was "at a couple's home, invited by the husband," he said. "Now that I am being told how the events unfolded, yes, the acts I committed would amount to rape," he added, but still claimed he was innocent of the charge.

Another man, a 37-year-old unemployed agricultural laborer, who is accused of raping Gisèle Pelicot on New Year's Eve in 2018, asserted he didn't intend to rape her. "As the husband had given me permission, in my mind she agreed to it," he said. A 40-year-old computer expert with two university degrees had a similar excuse for his alleged crime in June 2020. "I did not go there with the aim of committing a crime," he said. "I had absolutely no idea that Mrs. Pelicot was not consenting."

If we take these men at their word—and there are certainly reasons not to—they genuinely believed that if a husband allows someone to have sex with his wife, then his wife is available for sex. Given that Dominique Pelicot fooled many people, including his relatives, who have said they had always thought theirs was a happy family,



▲  
*Gisèle Pelicot  
leaves the  
courthouse in  
Avignon, France,  
on Oct. 23*

it's plausible the men thought they were dealing with a normal spouse who had an unusual kink. But, and here's the rub, that means they also thought that *husbands can grant access to their wives' bodies*. In France. In the 21st century.

**WHAT DOES IT SAY** about society that men accord husbands this kind of authority? If it were a woman's brother or father or cousin offering permission, would the men still have proceeded? Unlikely. They'd have called the police. If the shoe were on the other foot, and a wife invited women to commit a lesser violation, such as stealing a husband's car and taking it for a joyride while he slept in the back seat, claiming that her spouse enjoyed the adventure of waking up in a strange place, would the women have gone ahead without checking in with the husband first? OK, maybe some, but 50?

So sturdy is the reputation of husbands as guardians of wives and families that these men can claim they





**What  
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kind of  
authority?**

were fooled into raping Gisèle Pelicot, who has been at court observing their testimony during much of the proceedings. Many of the accused brought wives, girlfriends, sisters, and mothers to the court to attest to their character, to explain that these men were not real rapists, though their support is somewhat undercut by the fact that the men came in contact with Dominique via an online forum called *à son insu*, which means “without her knowledge.” Gisèle Pelicot, who has since divorced Dominique, addressed those women during her testimony on Oct. 23. She noted that she didn’t used to think her husband was a rapist either. “A rapist is not just someone you meet in a dark car park late at night,” she said. “He can also be found in the family, among friends.”

At least one defendant has argued that he was told Gisèle was pretending to be asleep because she was shy. Some claimed they had been manipulated by Dominique once they got to the home or suspected he had drugged them. Two said they were gay and

had been hoping to sleep with Dominique. And a depressingly large number said they had been sexually abused as minors. Nevertheless, “her husband said I could” has been a common theme in their testimonies, probably because their lawyers see it as the strongest legal defense they have. It is perhaps this, even as much as the psychopathic behavior of Dominique Pelicot, that is sending a chill down many women’s spines: this recognition of how vulnerable women are not just to husbands who have ill intent, but also to a community that holds husbands in such an exalted position that it does not question fundamentally sketchy situations if the man of the house is present.

So far, nobody has come forward to say they went to the Pelicots’ house and left in horror. Police have produced no reports from visitors who realized something was amiss and raised the alarm. Pelicot was unmasked only because he was caught photographing up women’s skirts by a security guard in 2020, and the cops found a cache of pornography on his devices, including videos of his wife in a folder marked “abuse.” There are no hero men in this story, except for those whose job it is to unearth crime. There is, of course, a hero woman: Gisèle Pelicot. If not for her determination to make this case public and willingness to waive anonymity, it might have attracted very little attention.

**MARRIAGE HAS BEEN** a foundational institution for the organizing of society and raising of young children for hundreds of years. Many reports suggest that it is now in decline, despite the abundant data that a good marriage improves health and happiness. Perhaps this case adds to the list of possible reasons why. The institution has become caught between two very different societal expectations. On the one hand, marriage is still largely viewed as a hierarchical power structure, with men at the head, rather than as an agreement between two equals to throw in their lot together. On the other hand, marriage no longer offers as robust an assumption of monogamy, fidelity, or exclusivity. A wedding ring has less and less power as a repellent to extramarital sexual approaches.

In other words, people hold Victorian ideals about the power in a marriage, but 1970s notions about the willingness of all people, including women, to be responsive to all sexual desires at all times, no matter the context. It is conservative and libertine at once. The combination of these two beliefs is uniquely treacherous for women, as this case has proved. When people believe that a husband calls the shots in marriage *and* can persuade themselves that anyone is available for sex in any situation, it leaves wide open the door for wives to be preyed upon.

Women can now earn their own money. They can have children without a partner. There’s scant stigma attached to being single. Obviously, very few husbands are as diabolical as Dominique Pelicot and not all men are potential rapists, but one of marriage’s benefits for women used to be a measure of security: not just from poverty or physical attack, but from the expectations of other men. If marriage no longer makes women feel safer, maybe that’s one more reason to go it alone. □





*Donald Trump  
delivers a victory  
speech in West  
Palm Beach, Fla.,  
in the early hours  
of Nov. 6*





POLITICS

# How Trump Won

THE FORMER PRESIDENT'S RE-ELECTION IS THE NEXT STEP IN A POLITICAL CAREER UNLIKE ANY OTHER IN AMERICAN HISTORY

BY ERIC CORTELLESA

PHOTOGRAPH BY JIM WATSON



# It was the moment he had fantasized about for four years.

At 2:24 a.m. on Nov. 6, Donald Trump strutted on stage in a Florida ballroom, surrounded by advisers, party leaders, family, and friends. The Associated Press had yet to call the race, but it was clear by then that the voters had swept him back into power. Staring out at a sea of supporters sporting red MAGA hats, Trump basked in the all-but-certain triumph. “We’ve achieved the most incredible political thing,” Trump said. “America has given us an unprecedented and powerful mandate.”

How Trump, 78, won re-election will be the stuff of history books, and already America’s choice can be traced to some key decisions. To Trump’s top aides, the thesis of the campaign could be summed up in a simple slogan: “Max out the men and hold the women.” That meant emphasizing the economy and immigration, which Trump did relentlessly. It meant diverting attention away from the chaos of his first term, the abortion bans he ushered in, and his assault on American democracy four years ago. It meant a campaign that rode the resentment of disenchanted voters and capitalized on the cultural fractures and tribal politics that Trump has long exploited.

Most of all, the outcome can be credited to a singular figure whose return to the White House traced a political arc unlike any other in 250 years of American history. Trump left office in 2021 a pariah after inciting a mob of supporters to ransack the U.S. Capitol at the end of an attempt to overturn his electoral defeat. Three years later, he engineered an unprecedented political comeback. Trump effortlessly dispatched his GOP rivals, forced President Joe Biden out of the race, and vanquished Vice President Kamala Harris in a dominant victory that exceeded virtually everyone’s expectations. Along the way, Trump shrugged off a 34-count felony conviction and an array of other criminal indictments.

The scale of his success was stunning. Trump carried North Carolina, flipped Georgia back to his column, and smashed through the Blue Wall. His campaign outperformed its goal of turning out men and holding women. Exit polls showed Trump winning large numbers of Latino men in key battleground states, improving his numbers with that group in Pennsylvania from 27% to 42%. Nationally, Trump’s support among Latino men leaped from 36% to 54%. Trump also increased his share of



voters without a college degree, gained ground with Black voters in Pennsylvania and Wisconsin, and held steady nationally with white women, shocking Democrats who had expected a post-*Dobbs* uprising. Among first-time voters, Trump boosted his support from 32% four years ago to a 54% majority.

**HE GOT HIS SHARE** of big breaks. When Trump launched this campaign on the heels of a third straight rebuke in national elections, Republican leaders tried to ignore him. His primary opponents were too timid to take him on. A combination of friendly judges and legal postponements pushed his most damning criminal trials to after the election. Until July, Trump’s general-election opponent was an unpopular incumbent viewed by many as too old to continue in the job. Biden only confirmed those suspicions when he bumbled through their first, and only, debate. The Democrats’ hasty replacement of the first-term President with Harris deprived them of a better-tested candidate who could potentially have rallied broader support. Voters took Trump’s own advanced age and increasingly incoherent trail rhetoric in stride. Much of the country read Trump’s legal woes as part of a larger corrupt conspiracy to deny him, and them, power. And he benefited from a global restiveness

▲ A sea of MAGA hats outside Madison Square Garden in New York City, the day of Trump’s Oct. 27 rally





in the wake of the COVID-19 pandemic that has ousted incumbent leaders around the world.

The consequences may be historic. Trump has dominated American politics for nine years now, and after four years of his tumultuous presidency punctuated by an insurrection, the country chose to reinstall him. Trump campaigned on an authoritarian agenda that would upend America's democratic norms, and he is already preparing to deliver on it: mass detention and deportations of migrants; revenge against political enemies via the justice system; deploying the military against his own civilians. How far he chooses to go with the power the public has handed him is a question that will shape the fate of the country.

To the MAGA faithful, Trump's victory is a thrilling vision coming into view. For the less fervent supporters who helped put him over the top, his rhetoric is largely bluster in service of reforming a government out of touch with America's economic and social needs. To the rest of the country and much of the world, a second Trump term looks like a blow to democracy in the U.S. and beyond. That split screen will animate American discourse for the next four years. The nation is more polarized than at any other point since the Civil War. But soon, there will be at least one thing that binds

us all together: come Jan. 20, we will all be living in Trump's America. This account of how Trump did it, based on more than 20 interviews over the past eight months, offers a glimpse of what that may look like.

**AS ALWAYS, THE STRATEGY** started with Trump's instinct. In April 2023, he was huddled with advisers at his Mar-a-Lago resort in Florida, days after he had made history as the first former President charged with a crime. The subject of the conversation: How could he control the political narrative? Trump had just gotten off the phone with his friend Dana White, the CEO of the Ultimate Fighting Championship. There was a fight that Saturday in Miami. "I think those guys would love me," Trump said.

When Trump entered the arena on April 10, he was met with thunderous applause. While there, he ran into the Nerk Boys, a group of influencers who host a right-wing podcast. Trump had gone on their show a year earlier, but it was removed by YouTube for spreading election lies. The chance meeting led to a second appearance. His closest confidantes didn't realize it at the time, but interviews on male-focused podcasts would become a through line of his extraordinary political resurrection.

It's easy to forget how shaky Trump's prospects seemed at the outset of his campaign. He announced his third bid for the White House in November 2022, days after Republicans took a beating in the midterms—the third straight national election in which the former President was seen as a drag on his party. Trump's handpicked candidates embraced his lie that the 2020 election was stolen and lost critical races across the country. Elected Republicans took it as a sign that America was done with Trump and nearly all shunned his grievance-riddled kickoff speech at Mar-a-Lago. They just hoped he would fade away.

But the early campaign launch turned out to be a savvy move, positioning Trump to cast his looming criminal prosecutions as politically motivated. With each indictment, he gained ground with the GOP base and raked in millions in cash. His primary challengers spent more time trying to beat up on each other than take out the man who stood in their way. Florida Governor Ron DeSantis, arguably Trump's most formidable opponent, dropped out after the Iowa caucuses. By March, Trump had secured enough delegates to become the presumptive Republican nominee. It was the fastest contested presidential primary in modern American history.

Trump's landslide in the primary was the product of a strategy honed by Trump's two

campaign managers: Susie Wiles and Chris LaCivita. Wiles, a veteran Florida-based strategist, had worked for DeSantis' 2018 run for governor, but they had a falling out after he was sworn in. Following the 2020 presidential election, Wiles took charge of Trump's primary PAC, Save America. In exile but already plotting his path back to Washington, Trump suspected his toughest obstacle in the 2024 primary would likely be DeSantis, sources close to him say. Who better to help him than Wiles?

Wiles recruited LaCivita, a hard-nosed Republican operative. Together, they drafted the campaign's strategy. The MAGA base was strong enough to assure Trump's victory in the GOP primaries, they concluded, giving them time to test-run a plan to defeat Biden in November. Trump's team focused on building an operation that could identify and turn out Trump supporters who were not reliable voters.

Wiles and LaCivita, political director James Blair, and Trump's longtime pollster Tony Fabrizio, believed that gender would be key. In 2020, Biden won by holding the same 13-point lead among women that Hillary Clinton had over Trump in 2016, while narrowing the gap among men by five points. "Men cost us the last election," a top Trump campaign source says. "Our objective became not to let that happen again."

**SURVEYS FOUND THAT MEN**, particularly young men, were turning away from Biden the most, especially over the economy. In a head-to-head matchup, Trump's lead was the most dominant among unreliable male voters younger than 40. Advisers concentrated on activating this cohort, which, by and large, saw Biden as an elderly man who shouldn't be President. These young men didn't get their news from mainstream media and were less concerned with reproductive rights or democratic backsliding. When they did interact with politics, it was mostly through edgy bro podcasts and social media. They appreciated Trump's brashness and habit of smashing norms. It was a risk to focus significant energy on turning out voters who don't care much about politics. But LaCivita would often repeat a Winston Churchill line that became a campaign mantra: "To try to be safe everywhere is to be strong nowhere."

As Trump pursued the male vote, he also had to avoid losing women by larger margins than in 2016 and 2020—no easy feat after his Supreme Court appointments helped overturn *Roe v. Wade* and pave the way for abortion bans across the country. Whenever abortion came up, Trump insisted the issue was now up to the states, and pivoted as much as possible to the economy, immigration, and crime—issues the campaign



believed triggered anxiety with well-to-do suburban women who were open to backing him.

When Trump spoke with *TIME* in April 2024, Biden's poll numbers were tanking and Trump's camp believed they were well on their way to a decisive victory. In two interviews, Trump laid out a second-term agenda that would reshape America and its role in the world. All the while, a constellation of Trump-allied groups, such as the Heritage Foundation's Project 2025 and the Center for Renewing America, were laying the groundwork to implement Trump's strongman vision. Many of their ideas—from imposing harsh abortion restrictions to gutting environmental protections and placing the entire federal bureaucracy under presidential control—were broadly unpopular with wide swaths of the electorate. But Trump seemed to think a victory in the fall was preordained.

The campaign's confidence only grew over an intense three weeks that began with Biden's disastrous June 27 debate performance. On July 13, Trump survived an assassination attempt in Butler, Pa., with the shooter's bullet piercing his ear and Trump rising to his feet and pumping his fist as blood streaked down his face, a spectacle of defiance that thrilled his supporters. Trump's announcement of 39-year-old Ohio Senator J.D. Vance as his running mate at the Republican convention days later seemed like a statement of confidence that the MAGA movement would endure long after its leader exited the scene.





**THE HIGH DIDN'T LAST** for long. Three days after the GOP convention concluded, Biden announced he would not seek re-election and endorsed Harris. In a matter of days, the Vice President consolidated Democratic support. Soon she was out-raising Trump by hundreds of millions of dollars, and hosting rallies that attracted the kind of attendance and enthusiasm her party hadn't seen since the Obama era. Trump's victory no longer seemed like a foregone conclusion.

In a series of meetings in Palm Beach and at Trump's New Jersey golf club, Wiles, LaCivita and their staff held bull sessions to address the threats posed by their new opponent. A younger candidate made it harder for them to attract voters disillusioned with Biden. Holding down losses with women while running against one would be even tougher. Democratic efforts to tie Trump to extreme agendas like that of Project 2025 were starting to bear fruit. Early internal polling indicated the challenge, according to Trump sources. Fabrizio had surveys showing that there was a broad appetite for change, and the biggest risk they had was letting Harris become the change-agent candidate.

The Trump team began running ads, and having their surrogates go on cable television, blaming Harris for Biden's presidency, surmising that she would inherit many of the vulnerabilities of her boss. They focused on her role working on immigration for the Administration, in which she was

assigned to address the root causes of migration from Central America, to blame her for a surge in border crossings. At the same time, Trump set out to distance himself from Project 2025, while working to paint Harris as further to the left than she really is.

Privately, the campaign estimated that Trump's message on abortion—to leave it to the states—was insufficient. Surveys showed that abortion rights were the third or fourth most important issue to voters. After months of Trump's dancing around the issue of federal restrictions, Trump's top lieutenants told him it was time to address it head-on. On Oct. 1, Trump posted on Truth Social that he wouldn't support a national ban.

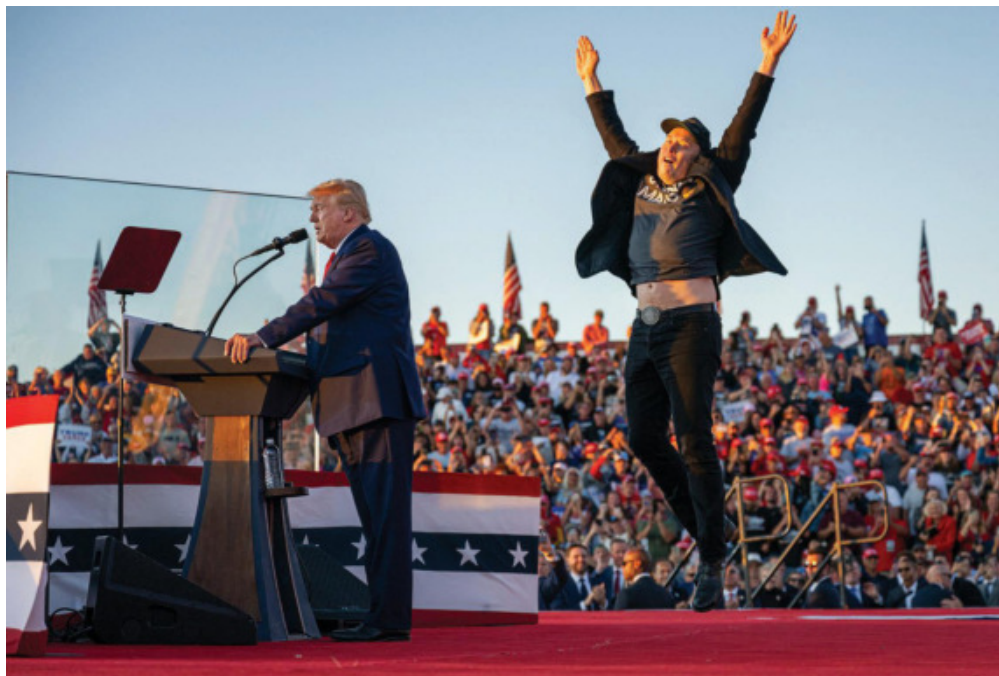
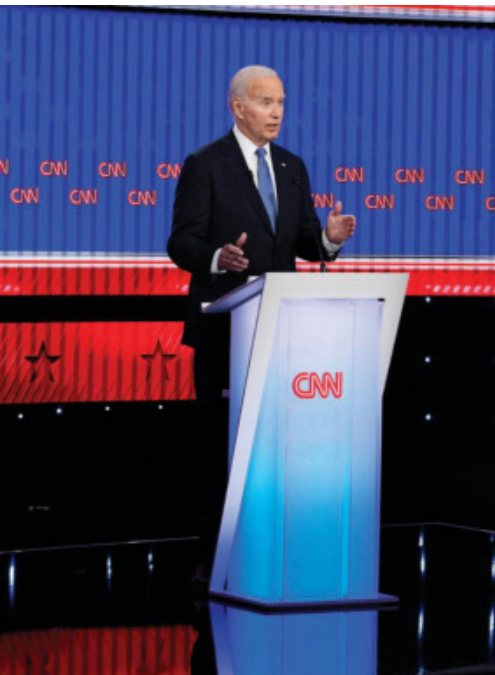
There were internal challenges as well. Trump was becoming increasingly restless and agitated. He brought in allies from his previous campaigns, including Corey Lewandowski, one of his 2016 campaign managers. One of the most consistent proponents of "let Trump be Trump," Lewandowski believed Wiles and LaCivita were blowing it, according to multiple campaign officials. In August, Lewandowski held a meeting with Trump in which he advised the Republican nominee to fire his entire campaign leadership, according to two sources familiar with the meeting. Trump made no commitments but nodded and heard him out. Wiles and LaCivita soon held a meeting with Trump to say that Lewandowski was creating a distraction, throwing the

*Reactions on Election Day—at a Harris event at Howard University, left, in Washington, D.C.; and in Palm Beach, Fla., near Mar-a-Lago, right*



^  
Scenes from a roller coaster of a campaign: Top, from left: Trump in court in New York City on April 30; debating Biden on June 27 in Atlanta; visiting the border in Arizona on Aug. 22. Bottom, from left: a raised fist after an assassination attempt in Butler, Pa., on July 13; at the RNC with Vance, July 15 in Milwaukee; and back in Butler, with an exuberant Elon Musk, on Oct. 5







campaign off course. What they have been doing has worked, Wiles told him, and it was not the time to deviate. Trump agreed. On his next plane ride, he held a meeting with all of them, including Lewandowski, who over the final weeks of the race was sidelined as an adviser, largely relegated to appearances on cable news.

Harris' momentum seemed to continue through September. She won the lone debate between the two candidates, baiting Trump into mistakes. "There was a lot of internal worry that she was a stronger opponent than we realized and that the ground has shifted," says a top Trump official. But the campaign was relieved a week later, when polling showed that the debate hardly changed the race and that the candidates were tied. Trump returned to his mantra: accelerate the push to win over young, male voters. In late July, Wiles tasked Alex Bruesewitz, a 27-year-old GOP consultant, with presenting Trump with a list of online podcast personalities for interviews, several people familiar with the matter tell TIME. Bruesewitz and Danielle Alvarez, another Trump senior adviser, reached Trump on the golf course the next morning.

"I have a list of podcasts I wanted to pitch you on," Bruesewitz said. Trump stopped him there. "Have you talked this over with Barron?" he asked, referring to his 18-year-old son.

"No, sir," Bruesewitz said.

"Call Barron and see what he thinks and let me know," Trump said, and abruptly hung up. Bruesewitz reached Barron later that day and learned that he was particularly fond of Adin Ross, a provocateur mostly known for collaborating with celebrities on livestreams of video games, such as *NBA 2K* and *Grand Theft Auto*. They agreed that's where Trump should start. The podcast strategy was in motion.

**IN AUGUST, TRUMP APPEARED** on Ross's podcast, which went viral, racking up millions of views on the livestream. The ensuing weeks were marked by a succession of fawning interviews with laddish podcast hosts: Logan Paul, Theo Von, Joe Rogan. The campaign made a deliberate decision to avoid most traditional media interviews.

Trump took an unorthodox approach to outsiders. He neutralized a potential third-party threat by offering Robert F. Kennedy Jr. control over health care policy in exchange for dropping out and endorsing him, Kennedy claimed. The campaign outsourced its most labor-intensive field operations in critical swing states to groups like Turning Point USA and America First Works. In the final weeks of the race, billionaire Elon Musk poured more than \$100 million into his own political action committee to help Trump in

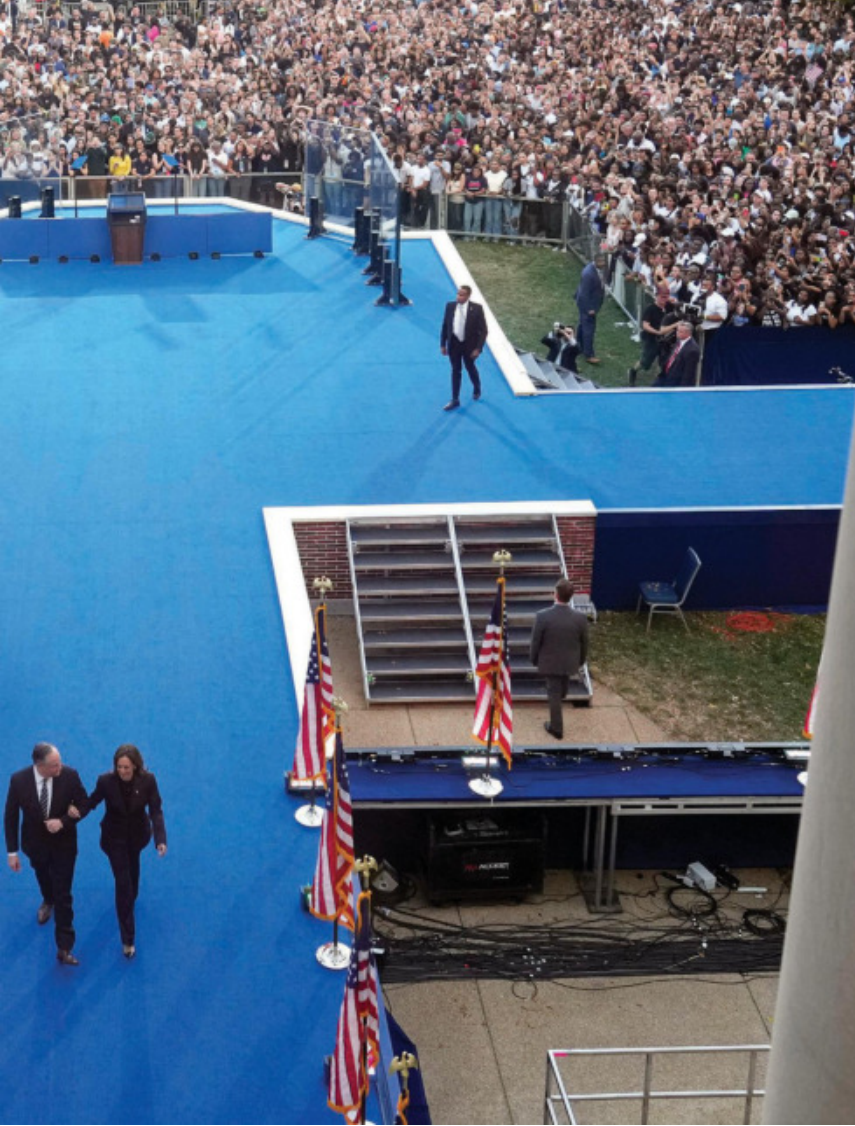


swing states. Promised the leadership of a new "government efficiency commission" that would oversee the myriad federal agencies that regulate his companies, Musk hired staffers and incentivized them with payouts to reach voters. He personally camped out in Pennsylvania, seen by both sides as the pivotal battleground state, and handed out \$1 million checks in sweepstakes for registered voters who signed a petition. Musk also turned X, his social media platform, into a cauldron of conspiracy theories and characterized the stakes of the race to his more than 200 million followers as existential. In the election's final weeks, he promulgated the far-right conspiracy theory that Democrats were "importing" undocumented immigrants to swing states to irrevocably tilt the electoral map in their favor. "If Trump doesn't win," Musk said, "this is the last election."

As always, Trump's self-destructive impulses posed a challenge. With a little more than a week before Election Day, he fulfilled a lifelong dream by holding a rally at New York City's Madison Square Garden. The event was marked by hateful, xenophobic, and racist rhetoric by Trump's warm-up speakers. The Trump campaign brought in an array

^ Harris, with the Second Gentleman after her Nov. 6 concession speech at Howard University, makes her exit





of profane pugilists, including the insult comic Tony Hinchcliffe, who called Puerto Rico a “floating island of garbage.” The campaign did not vet his remarks or upload them into the teleprompter ahead of his routine, according to two sources familiar with the matter.

Trump’s former chief of staff John Kelly had recently gone on record saying that Trump praised Hitler’s generals. Trump’s former Chairman of the Joint Chiefs of Staff, retired general Mark Milley, called him “fascist to the core.” Internal polling from the Harris campaign indicated that the odiousness of the rally was tipping late-deciding voters in her favor. It seemed like Trump might be imploding at the 11th hour.

**SHORTLY AFTER 9 P.M.** on election night, Trump entered a ballroom in his Mar-a-Lago club to a raucous ovation and a crowd full of his well-heeled benefactors. Behind him were his family members, including his son Eric and daughter-in-law Lara, and his youngest son Barron. For the next 3½ hours, he watched with glee alongside Musk and White as the returns rolled in even more favorably than his most bullish champions predicted.

Trump’s transition team is stacked with loyalists like former Cabinet secretary Linda McMahon and businessman Howard Lutnick; his sons Don, Jr. and Eric; and his running mate Vance. All of them were tasked with making sure only true believers join his Administration-in-waiting. He’s expected to tap into the network of organizations that have been preparing to implement his ideas. That includes Russ Vought, his former director of the Office of Management and Budget who runs the Center for Renewing America, who has been crafting draft executive orders Trump can sign within his first hours as President.

The first, and most aggressive, agenda item is expected to be immigration and the border. In his interviews with *TIME*, Trump said he plans to use executive power to begin mass deportations of undocumented migrants, ordering the National Guard, Immigration and Customs Enforcement, and federal law enforcement to conduct raids. Tom Homan, a former Trump official now affiliated with Project 2025, is expected to lead the effort, according to campaign sources.

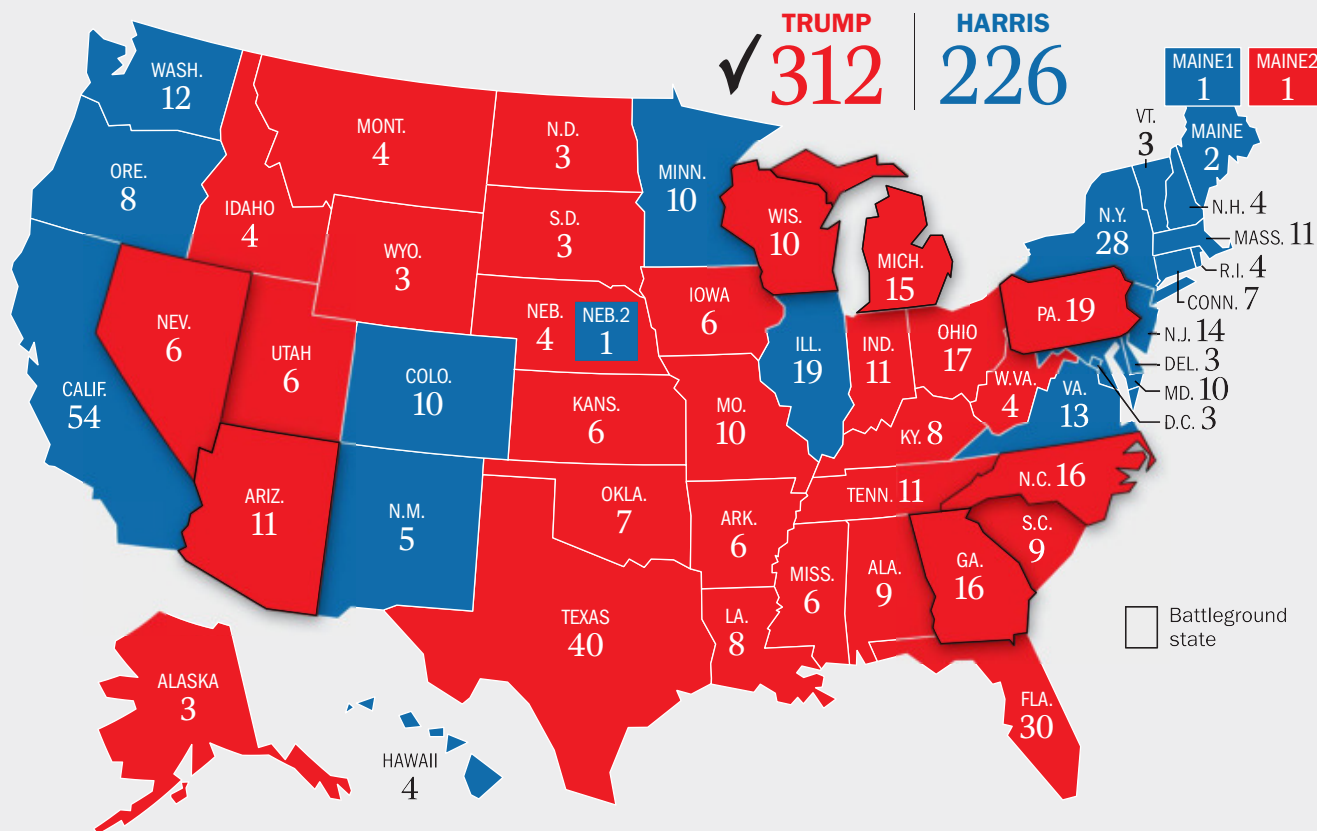
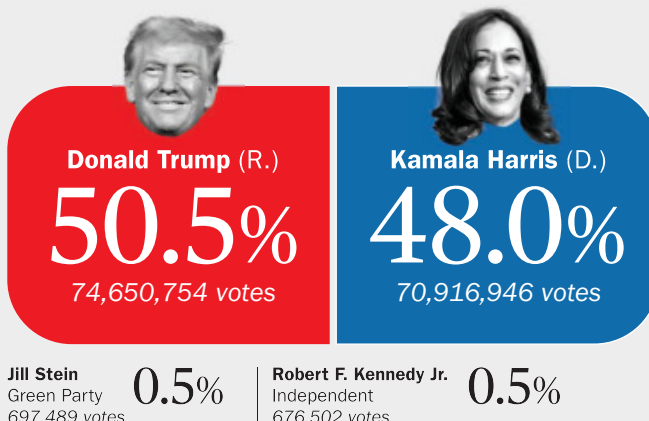
At the same time, top Trump advisers tell *TIME*, there will be a massive purge of the federal bureaucracy. The most satisfying part of that to Trump, they say, will be firing Jack Smith, the special counsel prosecuting him on charges of willfully mishandling classified information and conspiring to overthrow the 2020 election.

Trump’s most controversial moves are all but certain to face significant legal and political fights. He has vowed on the campaign trail to pick an Attorney General who will investigate and prosecute his political rivals and critics. Trump will be emboldened by a Supreme Court ruling last summer that granted U.S. Presidents potential immunity from some criminal prosecution for official acts. Between Trump’s psychological disposition, his vows to seek revenge on his adversaries, and the removal of many of the guardrails that hindered him in a first term, scholars of authoritarianism see a nation on the brink of crisis.

Ultimately the election is as much a judgment on the American people as it is on the man they have returned to office. Trump’s comeback didn’t happen at random. By building a social and political movement that gave him coercive power over the Republican Party, Trump systematically demolished many of the nation’s long-standing norms, ushering in a cohort of lackeys who will enable his most autocratic impulses. He will enter his second term committed to creating a governing environment with few restraints on his power. He did not hide any of this. It was what the American people decided they wanted. — *With reporting by* PHILIP ELLIOTT/WASHINGTON

## Mapping the result

When Americans cast their ballots for the next President, they also faced other questions. The entire U.S. House and a third of the U.S. Senate were up for election, plus state and local offices. In addition, voters in many places were asked to make law by voting up or down on referendums. Here's a look at the results, as of the morning of Nov. 10.



### ABORTION ON THE BALLOT

This election saw the highest number of statewide abortion-related ballot measures in a single year. Voters in seven states—**Arizona, Colorado, Maryland, Missouri, Montana,**

**Nevada,** and **New York**—moved to protect reproductive rights by passing ballot initiatives. But similar measures in three other states (**Florida, Nebraska,** and **South Dakota**) failed,

in a blow to abortion-rights supporters. And the country ultimately re-elected the man who has claimed credit for the Supreme Court ruling that overturned *Roe v. Wade*. The results broke

a trend: since the 2022 *Dobbs* decision that threw the question to the states, voters had sided with abortion rights every time the issue appeared on state ballots.

—Chantelle Lee



## THE RACES THAT FLIPPED THE SENATE

Two three-term Democratic Senators, **Sherrod Brown** in Ohio and **Jon Tester** in Montana, were defeated in races that helped flip Senate control to the Republican Party. Republicans **Bernie Moreno** and **Tim Sheehy**, respectively, will take over their seats, ending the Democratic Party's four-year control of the Senate. Republicans also flipped a seat in West Virginia, with Republican Governor **Jim Justice**'s win in the seat vacated by **Joe Manchin**. Close races in Nevada and Pennsylvania could boost their majority, a cushion that may embolden Trump's choices in nominating judges and Executive Branch officials, whom the Senate must confirm. —*Simmone Shah*

## BYE-BYE BLUE WALL

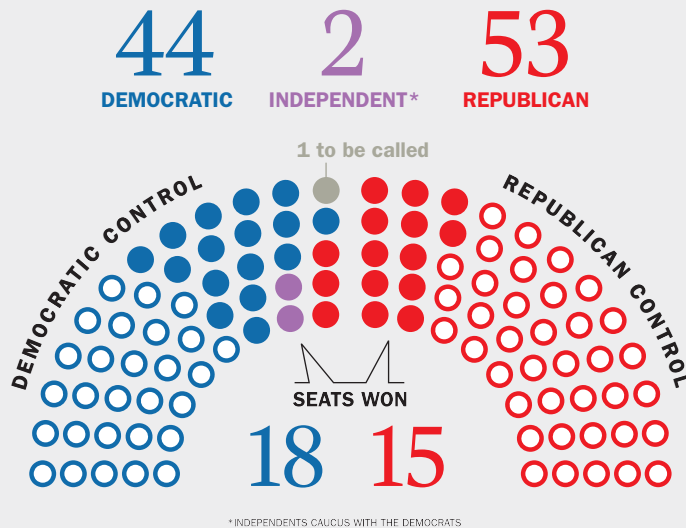
Trump broke through the "Blue Wall"—particularly in Michigan, where many Arab Americans said they'd withhold votes from the VP in protest over the war in Gaza. Even so, incumbent **Tammy Baldwin** of Wisconsin and Michigan Representative **Elissa Slotkin** narrowly (by some 29,000 and 17,000 votes each) won their races, delivering two of the region's Senate seats to Democrats.

—*Solcyré Burga*

## THE NEW SENATE

34 OF 100 SEATS UP FOR GRABS

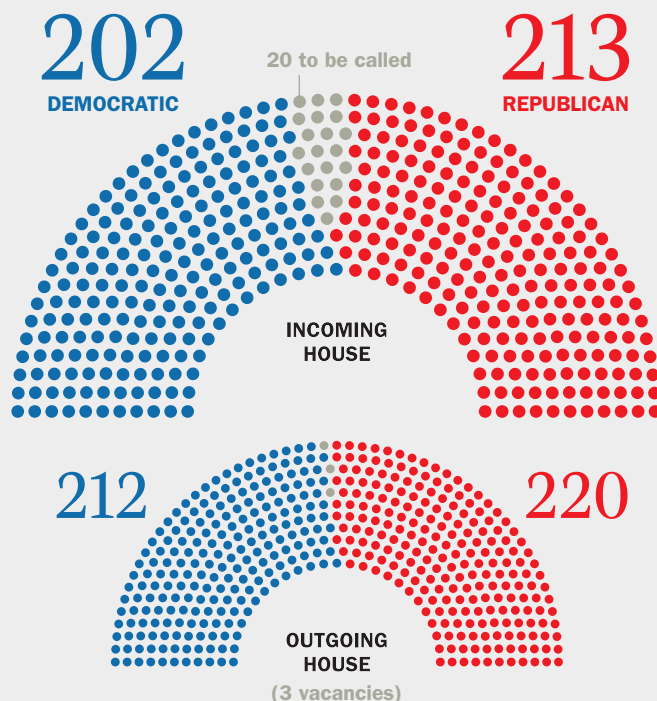
Democrats currently have a 51-49 advantage in the chamber, but failed to hold the seats needed to maintain a majority



## THE NEW HOUSE

ALL 435 SEATS UP FOR GRABS

If Republicans maintain control of the House with wins in key districts, they'll grant the GOP a trifecta



## LATINOS FOR TRUMP

Exit polls suggest that as many as 45% of Latinos voted for **Donald Trump**—up from 32% during the 2020 presidential election, and signaling a major rightward shift among the fastest-growing ethnic group in the U.S. (Latinos now make up nearly one-fifth of the U.S. population, according to the Census Bureau.) The Hispanic vote was divided by gender, with 55% of Latino men voting for Trump compared with 38% of women. The gains came in spite of comedian Tony Hinchcliffe's referring to Puerto Rico as an "island of garbage" during an Oct. 27 Trump rally. —*S.B.*

## MAKING HISTORY

Among several notable firsts were **Sarah McBride**'s election as the first trans member of Congress, New Jersey Democratic Congressman **Andy Kim**'s as the first Korean American Senator, and **Julie Fedorchak**'s as North Dakota's first woman in the U.S. House. **Angela Alsobrooks** and **Lisa Blunt Rochester** will also be, respectively, Maryland's and Delaware's first Black female Senators—and the first Black women to serve at the same time in the chamber's history.

—*Rebecca Schneid*



*"It's never just about 'Baby or no baby?'" says Merle Bombardieri. "It's about everything."*





SOCIETY

# BABY TALK

**UNSURE ABOUT HAVING KIDS?  
THERAPIST MERLE BOMBARDIERI  
CAN HELP YOU FIGURE IT OUT**

*By Jamie Ducharme*

MERLE BOMBARDIERI LEARNED SHE WAS a micro-celebrity in 2020, when she happened to Google her own name. Her search led her to a Reddit group of “fence sitters”—people who aren’t sure whether they want to have children—where she is a very big deal. Post after post mentions her book *The Baby Decision: How to Make the Most Important Choice of Your Life* and its power to help people get off the fence, one way or the other. “It’s a sort of bible,” says Christy Starr, a 36-year-old member of the Reddit community who lives in Wisconsin.

Bombardieri, a 75-year-old therapist who also coaches people about whether they should have kids, was tickled by her VIP status among a group of people young enough to be her children or even grandchildren. She joined the r/Fencesitter message board and now spends about five hours per week answering people’s questions for free. (She could easily spend even longer: once, she hosted an “ask me anything” thread, and it took her 10 weeks to answer every question.) She sees her involvement in the group, which today has about 70,000 members, as a moral obligation. “Not everybody can buy a book. A lot of people can’t afford a coach or a therapist,” she says. “And I really want the information to be out there.”

There’s clearly a need. Most U.S. adults eventually have children. But more people—both men and women—are thinking critically about a major life choice that not too long ago was basically seen as a given.

About a third of U.S. adults under 35 who

don't already have kids say they don't know whether they want them, and only 22% of people in that age group say having kids is very important or extremely important for living a fulfilling life, according to 2024 statistics from Pew Research Center. A stunning half of U.S. adults under 50 who don't already have kids think they'll stay child-free forever. Most say they simply don't want kids. But financial strain and concerns about the state of the world and the environment are also common reasons, according to other Pew data. People are feeling so much angst about when, how, and whether to procreate that new psychological concepts have emerged to help make sense of how people make these decisions.

Bombardieri, herself a mother of two and grandmother to one, was far ahead of that curve. She published *The Baby Decision* in 1981, decades before fence sitting was mainstream. It flew largely under the radar before blowing up in 2016, when Bombardieri self-published an updated version. "At the age of 67," Bombardieri says, "I became more well-known, more financially successful, than I was when I was younger."

Not only did she have the internet on her side the second time around, which helped more people find the book, but the world had also changed in other ways. Shifting cultural norms; evolving ideas about gender, sexuality, and partnership; concerns about politics, climate change, and gun violence; and the aftermath of a brutal economic recession had left many 20- and 30-somethings unsure about parenting and desperate for a book like *The Baby Decision*. Bombardieri has sold about 60,000 copies of the updated version and plans to release a new book, *Baby or Childfree?*, in early 2026.

Starr, from the Reddit fence sitters' community, credits an exercise in *The Baby Decision*—acting out an argument between your pro-baby and anti-baby sides—with helping her decide to become a mother. It nudged her to realize that she really did want a kid, and that most of her reasons for being child-free were rooted in fear. "It was surprising, how much the side that wanted a child was arguing for it," Starr says. "It really made me feel more secure."



Bombardieri isn't alone in doing this work. Others have made a name for themselves in the space, such as Ann Davidman, a California-based psychotherapist who wrote a book on parenthood decisionmaking and offers workshops and coaching sessions, for one. And there's now a bona fide industry of "decision coaches," along with traditional therapists, who help people work through all manner of difficult choices, including whether to have children.

But Bombardieri is the OG. People from all over the world—most of them women—pay \$200 to \$300 per session to hash out the parenthood question

with her. Once upon a time, Bombardieri says, most of her clients ultimately decided to have kids. But these days, the breakdown is closer to 50-50.

**PEOPLE WITH KIDS KNOW** that it's impossible to truly grasp what you're in for before you become a parent. Making this life-altering decision is always, on some level, about coming to terms with uncertainty. You can't really know how you'll feel about waking up in the middle of the night to feed a screaming baby until you have to do it.

How can anyone, even a trained mental-health professional, help someone make a decision so momentous and



personal? “There are people who think that no one else can help them,” Bombardieri says, but she disagrees. She sees herself as a guide for people who are “lost in their own thinking,” paralyzed by endless worry about all the ways their lives will change and all the questions that are impossible to fully answer. “It’s never just about ‘Baby or no baby?’” she says. “It’s about everything. It’s about acknowledging that you’re going to die someday, and what do you want to have happen in between?”

Bombardieri tries to help people interrogate their preconceived notions about parenthood and visualize what they’d gain or give up on either path. Perhaps most importantly, she helps people grapple with the idea of regret, which haunts many fence sitters. Most people will have at least occasional pangs for the road not taken, and that’s OK, Bombardieri says. The goal is to figure out which road will lead to fewer regrets, and to grieve those feelings rather than suppress them. “The people most likely to regret a decision are the people who don’t make a decision”—people who run out their biological clock or accidentally-on-purpose forget to take birth control because they can’t bring themselves to fully commit to a choice, Bombardieri says.

Katie Wilson, a 46-year-old living in Washington, D.C., had all but committed to the child-free life until she hit her mid-30s. Spooked by the reality that she was running out of time to change her mind, Wilson spiraled into indecision. “I felt alone,” she remembers. “I felt like I was the only person I knew who wasn’t clear.”

Wilson learned about Bombardieri’s book in her search for clarity. And in 2014, she flew to Boston to attend Bombardieri’s parenthood-decisionmaking workshop. For hours, Bombardieri led attendees through exercises and

discussion groups meant to help them make sense of their inner turmoil. She seemed to Wilson like “a vessel for all of these questions that have come before mine,” an unbiased and quietly confident voice helping her make sense of her own scrambled thoughts. Eventually, after the workshop and additional one-on-one coaching sessions with Bombardieri, Wilson and her husband decided to stay child-free.

Today, Wilson and Bombardieri together moderate a Facebook group called The Decision Café, where hundreds of people in the throes of making their choice can lean on one another for support. For Wilson, the group is a way to democratize the experience that Bombardieri offered her years ago. “A lot of people are looking for role models,” she says. “They’re looking for people like them.”

**BOMBARDIERI KNOWS WHAT** she’s talking about because she’s lived it. While an undergrad at Michigan State University, she turned down a marriage proposal from her now husband Rocco because he wanted kids and she wasn’t sure. Her mother had always seemed bored in her role as a housewife, and Bombardieri, who dreamed of getting a doctorate in literature and becoming a professor, worried motherhood might hold her back. Plus, Bombardieri just wasn’t positive she’d enjoy the daily realities of parenthood. When Rocco proposed, “I had just come back from being a counselor at a summer camp with really, really spoiled 12-year-old girls, and my favorite part of the day was when the camp day was over and the campers were asleep,” she says. Bombardieri loved solitude and tranquility, time to read and reflect, and she couldn’t envision where screaming babies or angry teens fit in.

This was also the 1970s, the era of consciousness-raising groups and second-wave feminism, when some women were chafing against their roles as mothers and housewives. “There was kind of a feeling of ‘If you have a child, you’re going to be a traitor to the movement,’” Bombardieri says.

Slowly, though, her opinion changed. She found role models who’d successfully balanced interesting careers in

## 4 COMEBACKS TO ‘WHEN WILL YOU HAVE A BABY?’

Here’s what to say the next time friends, family, or complete strangers pepper you with intrusive questions about when you’ll start reproducing.

### “HMM. I’M CURIOUS WHY THIS IS IMPORTANT TO YOU.”

Curiosity disarms people and opens up dialogue, says perinatal psychologist Suzanne Mungalez. Maybe they’re struggling with their own uncertainty.

### “WHAT IF I TOLD YOU I HAD BEEN TRYING FOR YEARS?”

Presenting a hypothetical invites your prying acquaintance to consider the impact of their question, Mungalez says; most will think twice before asking again.

### “WOW! I JUST HAVEN’T HAD TIME—GOOD THING YOU REMINDED ME!”

People on the receiving end of this response are typically dumbfounded, says ob-gyn Dr. Dymrna Weil. “It’s kind of cheeky, without being snarky.”

### “WHY DO YOU ASSUME EVERYONE WANTS CHILDREN?”

This is a way to expose the other person’s shortsighted thinking and bias about what a family looks like, says psychologist Regina Lazarovich.

—Angela Haupt

**HALF OF U.S. ADULTS UNDER 50 WHO DON’T ALREADY HAVE KIDS THINK THEY’LL STAY CHILD-FREE FOREVER**

academia with motherhood and got more comfortable around children while working in day-care centers. She also devised early versions of the exercises that eventually appeared in *The Baby Decision*, like the one that helped Starr: staging an argument between your two minds on the matter. “It would have been nice to have the book,” she says with a laugh.

Eventually, Bombardieri concluded that she could have kids without losing herself. After marrying Rocco, she had her first daughter in 1977, then her second in 1979. In 1981, *The Baby Decision* was born. She was pregnant with Vanessa, her youngest, while writing it on her typewriter. “I’d be going, ‘Click, click, click,’ and she’d be going, ‘Kick, kick, kick,’” Bombardieri says.

She hoped the book would help other people unsure about parenthood and destigmatize the choice not to have children—which she argues should be the default position unless people are confident they want to bring kids into the world. Bombardieri hated the stereotype that child-free adults were selfish Peter Pans who just wanted to “lie in the sun and go on vacations,” because she felt the exact opposite tended to be true. “If you’re not going home and spending all weekend nurturing a young child, you have time and energy to do other things that make the world a better place,” she says.

Even 40 years later, with the U.S. fertility rate falling to record lows and heteronormative family structures no longer necessarily the standard, so-called pronatalism has surprising staying power. Bombardieri still considers people who choose not to have children “mavericks”—and although her book is neutral about the question of having kids, Bombardieri says the most emphatic thanks she gets are from child-free people who feel relieved that someone validated their choice.

“When I wrote my book in 1981, I would have assumed that by now there would be a lot more acceptance of child-free people than there is,” she says. But as it turns out, even in 2024—and perhaps especially in 2024, when Vice President-elect J.D. Vance’s suggestion that “childless cat ladies” shouldn’t have the same voting privileges as parents

got a huge new platform during his campaign—child-free people need a voice, she says. That’s partly why she’s writing her new book. But it’s also a recognition that people’s worries about parenthood have changed even since the 2016 version of *The Baby Decision*.

Back in the ’80s, she says, people were still awakening to the reality that there are many ways to achieve happiness and that procreating is only one. Her book helped further that idea. The 2016 rerelease rose from a desire to share the wisdom won from her decades of coaching and therapy work, and to speak to the concerns of a generation that felt politically, economically, and socially unsettled. “I hope I have a long life,” she remembers thinking when it came out, “but if I died tonight, I’m so glad that I have these ideas out in the world.”

In recent years, however, she began getting peppered with questions from her clients and Reddit followers that even the newer book couldn’t answer. Climate-crisis projections continue to intensify, leading some people to question the morality of having a child and others to fear what kind of world their future offspring would inherit. The rollback of reproductive rights has many people worried about what could happen if their pregnancy went wrong. Even many women in states with robust reproductive care now report deep fears about the risks of pregnancy and childbirth—because the news and social media are so full of horror stories that many women now think outcomes that are bad, but rare, are likely, Bombardieri believes. And many potential parents are worried about how a baby would change the division of labor in their partnership, a particularly relevant concern now that women outnumber men in the college-educated workforce.

It’s a fraught time for could-be parents. They are confronted, from one

angle, with people like billionaire (and father many times over) Elon Musk arguing that declining birth rates will lead to societal collapse. On the other side, there’s a small but growing antinatalism movement that argues it’s irresponsible to bring children into a violent and overpopulated planet plagued by a worsening climate crisis.

These forces clearly weigh on people, as more seem to be struggling with the baby decision than ever—enough that Bombardieri is training a handful of clinicians (including her daughter Vanessa) to continue her work in this burgeoning specialty.

**BOMBARDIERI IS A DECADE** postretirement age, after all. Once she finishes her forthcoming book, she’d like to get to a place where she can finally wrap up a long-gestating novel about surrogacy, write poetry, draw, and simply slow down, enjoying time with her friends, family, and husband.

The life she is heading toward, full of meaningful relationships and time for rest, relaxation, and contemplation, sounds an awful lot like the one she imagined for herself before deciding to have kids all those years ago. She gave up the peace and quiet of her daydreams for the messy unknown, making the leap that scares so many fence sitters. Did she ever regret it?

“You know, certainly in the earliest years of parenting, when it was really taxing and two kids were crying at the same time or whatever, I would think, Life would be easier if I didn’t have a child,” Bombardieri says. “But I didn’t regret the decision. I just love my daughters so much and enjoy them so much.”

That’s not to say Bombardieri hasn’t wondered, from time to time, what a different life might have brought with it. More travel and less financial stress, probably. More published books, maybe even an M.F.A. Bombardieri can clearly visualize that alternate route, and she seems neither guilty for admitting to its existence nor wistful about not having taken it. It’s merely a different ending to the choose-your-own-adventure book of her life—exactly the kind she’s trying to help fence sitters everywhere write for themselves. □

**‘IF I DIED TONIGHT,  
I’M SO GLAD THAT I  
HAVE THESE IDEAS OUT  
IN THE WORLD.’**

—MERLE BOMBARDIERI



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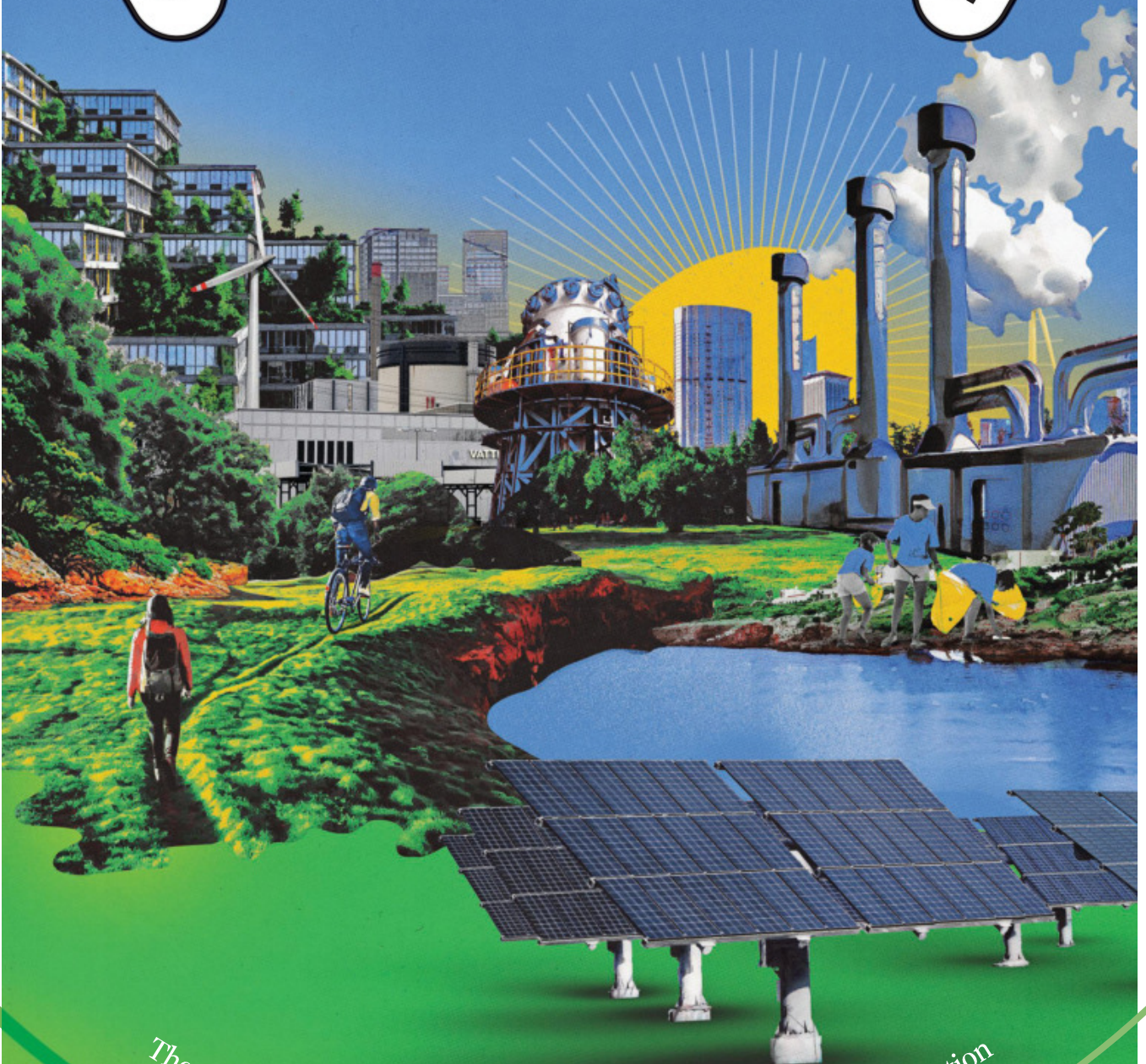
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TIME100

# CLIMATE



These are the **100** most influential leaders driving business climate action

ILLUSTRATION BY MAX-O-MATIC FOR TIME

# Ajay Banga

PRESIDENT  
WORLD BANK

AJAY BANGA DIDN'T LIKE THE EXISTING DECOR, SO when he took over as World Bank president he gave his grand two-story corner office a makeover. Old-school leather furniture? Gone. Dark lighting that made the space feel like a dungeon? Replaced. And a depressing painting? Swapped out for three framed motivational quotes: "Question everything always," "Done is better than perfect," and "Fail harder." "They are kind of my philosophy of working," he tells me only moments after my walking in the door. My conversation with Banga at the World Bank's Washington, D.C., headquarters dug into the wonkiest details of climate finance, from the role portfolio guarantees can play in reducing credit risk to the investment challenges posed by volatile currencies in emerging markets. But his quick office tour offered just as much insight about his approach to running the world's most important development bank: seemingly small tweaks can make a huge difference.

Banga entered office in 2023 after his controversial predecessor, David Malpass, was forced to resign following controversial remarks that seemed to doubt the science of climate change. Many environmentalists called for a full-scale revamp of the 80-year-old World Bank and other international financial institutions. The bank's most powerful members—including and especially the U.S.—have also pushed for a greater focus on climate while stopping short of endorsing some of the boldest efforts to remake the institution. Banga has approached the task judiciously.

Under his leadership, the bank has added climate to its mission statement. To implement his agenda, he has pursued a range of seemingly small reforms that can have a big impact accelerating global climate action and intertwining it with the bank's long-standing development agenda. He has tweaked the rules about how much the World Bank can lend, freeing up space to finance more climate projects. He has sought to integrate climate change into other development programs, from agriculture to education. And he has worked closely with the private sector in hopes that companies will step up to invest the lion's share of the trillions of dollars needed to pay for expanding clean energy in

the Global South. "There's a whole Rubik's Cube to be solved," he says. "If it begins to make sense numerically, money does flood in."

This work comes as the focus of the global climate conversation increasingly turns toward finance—both for the energy transition and the adaptation needed to prepare communities around the world for the increasingly dire effects of rising temperatures. Research has found that emerging markets and developing countries need to spend upwards of \$2 trillion annually to meet global climate goals. And at the annual U.N. climate conference—this November known as COP29 and held in Baku, Azerbaijan—diplomats from nearly 200 countries are working to hash out a climate-finance deal that lays out how much countries in the Global North will give to help their developing counterparts. The most ambitious proposals call on wealthy nations to provide upwards of a collective \$1 trillion each year to the Global South. Banga knows that the World Bank's work is a critical part of the picture, but he tries not to dwell on it. Getting the small things right first will eventually lead to big changes, he says. "Rather than get bogged down by the trillions," he says, "work on solutions, and let them build at scale."

**IN LATE OCTOBER**, as finance ministers from around the world flocked to Washington, D.C., for the annual meetings of the World Bank and the International Monetary Fund (IMF), Banga darted between conversations on agriculture, gender, and jobs. From a quick glance at his schedule, climate change barely seemed to come up. But actually listening to him talk paints a different picture. At an agriculture dialogue, his announcement to double the bank's agriculture-finance commitments to \$9 billion annually by 2030 included programs for smallholder farmers to incentivize greener practices. His gender strategy links gender inequality with growing weather extremes; simply put, more fragile societies lead to increased risk of gender violence. And he frames investments in jobs and education as a pathway not just to growing economies but also to climate resilience and the deployment of clean energy.

In a way, this is a unique feature of how Banga envisions the bank working on climate. He tells me the approach is born of his travels to member countries around the world

where he saw how climate change was exacerbating other challenges on the ground, from migration to educational attainment. "It's intertwined," he says. "You can't segregate it." There's an element of practicality to this approach too. The World Bank was first founded after World War II to help finance the reconstruction of Europe, and, along with the IMF, has since become a central node in a group of international financial institutions meant to help developing countries grow their economies and get through tough times. And, while the effects of climate change are of dire concern to leaders in the Global South, that's not the only thing on their minds. Citizens still expect their

**'You can  
change  
destiny, but  
you have to  
work at it.'**

—AJAY BANGA



BANGA AT  
WORLD BANK  
HEADQUARTERS  
IN WASHINGTON,  
D.C., ON OCT. 18



PHOTOGRAPH BY STEPHEN VOSS FOR TIME

governments to deliver development—from better roads and bridges to new jobs. And that has been especially challenging in the post-COVID-19 period when strained budgets have left many countries in deep debt.

Banga has had to thread a difficult needle—showing member countries that he is committed to the bank’s tried-and-true mission while advancing climate efforts. And so many of his efforts have focused on using existing mechanisms rather than creating new, exclusively climate-focused ones. He adjusted the so-called equity-to-loans ratio, which determines how much the bank can lend, to allow it to lend an additional \$30 billion over the next decade. He streamlined bureaucratic processes to cut average project approval time from 19 months to 16. And he used the bank’s profits to start a new Livable Planet Fund, which will be used to cut the costs of financing projects. The results have been significant. The bank’s climate finance deployed neared \$43 billion in the last fiscal year. That’s a 10% increase over the prior year and brings it close to reaching its 2025 target of devoting 45% of its financing to climate. And all that money can go even further as it attracts private capital on its coattails.

Still, it doesn’t take a math Ph.D. to see that the World Bank won’t be able to fill the massive climate finance gap on its own. The bank manages hundreds of billions of dollars in investments; climate change requires annual investments that measure in the trillions. “There is no way that any amount of financial engineering that I do with the balance sheet ... can get there,” he says. “The reality is everybody has fiscal constraints.” Banga’s solution is private finance. The owners and managers of trillions of dollars in capital have said they want to invest in the energy transition, but a flurry of risks have held them back. “This idea that you can wave a wand and get the private

sector to come in ... it’s not how it works,” says Banga.

But Banga thinks he can bridge the gap. It makes sense. Before leading the World Bank, Banga had a storied career in the private sector, most notably as the CEO of Mastercard but also in banking and in growth equity. Since taking office, he has launched a Private Sector Investment Lab working with the CEOs of BlackRock, HSBC, and other big financial institutions to work through the biggest challenges holding back private investment, from currency risk to a lack of regulatory certainty. In October, he launched a set of solutions tailored to address those risks. “He fundamentally

understands that to take on these big, bold aspirations and actually execute them on a timeline, you have to work outside of your own institution,” says Rajiv Shah, the president of the Rockefeller Foundation, which in September joined a World Bank program to provide electricity to 300 million people across Africa.

Every World Bank president faces their share of critics. And Banga is no exception. Some fear that his climate initiatives veer too

far from the bank’s original mission. Others say his climate work is too piecemeal and too reliant on the private sector. A re-envisioning of the postwar international financial system with new institutions focused solely on climate would better serve us, they say. Banga is aware of all the challenges the bank must navigate, particularly as countries face populist revolts in parts of the world that aren’t too happy about multilateralism. Along with his IMF counterpart, he’s convened a working group to think through some of the big questions. But when I ask him about what the bank may look like in 30 years, he pivots right back into the programmatic changes he’s making today. “Forecasts are not destiny,” he says. “You can change destiny, but you have to work at it.” —JUSTIN WORLAND



BANGA, LEFT, SURVEYS THE IMPACT OF RISING SEAS IN FUNAFUTI, TUVALU, IN SEPTEMBER

**Fernando Haddad**  
MINISTER OF FINANCE  
BRAZIL

Haddad’s climate plan aims to create millions of new green jobs and drive significant economic growth.

**Jigme Khesar Namgyel Wangchuck**  
KING  
BHUTAN

Covered in forests, Bhutan is the world’s only carbon-negative country.

**Wang Chuanfu**  
FOUNDER AND CEO  
BYD

Thanks in part to its signature battery, BYD is the world’s top EV manufacturer, selling over 3 million cars in 2023.

**Teresa Ribera**  
MINISTER FOR ECOLOGICAL TRANSITION AND THE DEMOGRAPHIC CHALLENGE  
E.U.

Ribera is tasked with keeping the E.U. on track with its Green Deal.

**Sadiq Khan**  
MAYOR  
LONDON

Khan made his case for going green a political plus, launching a climate plan while running for a third term as London’s mayor.



Q

WHAT IS A  
CLIMATE SOLUTION  
THAT ISN'T GETTING  
THE ATTENTION  
OR FUNDING  
IT DESERVES?

## 'Energy-efficiency projects in the Global South.'

**Damilola Ogunbiyi**  
CEO

SUSTAINABLE ENERGY FOR ALL

'Geothermal is the ubiquitous "heat beneath our feet," and one of our most promising leads on the holy grail of climate solutions.'

**Jennifer Granholm**  
SECRETARY  
U.S. DEPT. OF ENERGY

'In all climate policies and projects, we need to make sure women are at the forefront.'

**Simon Stiell**  
EXECUTIVE SECRETARY  
U.N. CLIMATE CHANGE

## 'Restoration of our ecosystems.'

**Susana Muhamad**  
MINISTER OF ENVIRONMENT  
AND SUSTAINABLE DEVELOPMENT  
COLOMBIA



### Ed Miliband

ENERGY SECRETARY  
U.K.

As the U.K.'s new Energy Secretary, Ed Miliband is on a mission to make Britain a global climate leader. Within the first 72 hours of the Labour Party's forming a new government this July, the country's ban on onshore wind-power projects was lifted.

Less than a month after the election, the "Great British Energy Bill" was introduced to Parliament—if passed it will establish a publicly owned energy company that prioritizes clean power. Now, Miliband is working on a new target for cutting the U.K.'s greenhouse-gas emissions in the next decade, due to be announced at the

upcoming U.N. climate conference. "The message we're taking to COP29 is that Britain is back in the business of climate leadership," Miliband tells TIME. "This is a pivotal moment for the world. We're nearly halfway through the decisive decade for climate action, and the world is way off track."

—Kyla Mandel

### Niels Christiansen

CEO  
LEGO GROUP

One message Niels Christiansen has heard loud and clear is that "kids are concerned about the environment," he says. And there may be no greater threat to the environment than oil—a key component in LEGO's iconic plastic bricks. But perhaps not for much longer. This year, the company announced it is making bricks from plastic made partially of renewable or recycled

materials like used cooking oil. Lego is paying up to 60% more for this greener plastic than it would for the purely fossil-fuel-based alternative, in hopes of stimulating demand and jump-starting the market. If it succeeds, this effort may pave the way for other companies to wean themselves off traditional plastics too. "Lego play," he says, "cannot come at the expense of the world. When you serve kids, you want to make sure the planet they inherit is ... one that lasts for a long time."

—Jessica Hullinger

### Anne Hidalgo

MAYOR  
PARIS

France's capital has become a climate leader, including with its statement-making green Olympic Games.

### Bill Gates

FOUNDER  
TERRAPOWER

Gates invested \$1 billion in TerraPower's innovative nuclear power plant, which broke ground this year.

### José Muñoz

GLOBAL CDO  
HYUNDAI

Under Muñoz's leadership, Hyundai now constitutes 10% of the U.S. EV market, second only to Tesla.



## Wally Adeyemo

DEPUTY SECRETARY AND CHIEF  
OPERATING OFFICER  
U.S. TREASURY

In 2022, Congress passed the Inflation Reduction Act (IRA), containing the largest climate investment in U.S. history. Adeyemo, who oversees the Treasury's rollout of the IRA's estimated \$369 billion climate plan, says: "My colleagues and I are laser-focused on providing the guidance and tools needed to make sure Americans reap [IRA] benefits." In 2023, Adeyemo's efforts enabled over 2 million families to claim \$2 billion in credits for residential home improvements to boost sustainability, such as installing heat pumps or more efficient air conditioners, and more than a million families claimed over \$6 billion in credits for residential clean-energy investments like solar electricity generation and battery storage. In January, the Treasury also implemented a tax credit for electric-vehicle purchases, which by June had been used for more than 150,000 EVs, saving consumers over \$1 billion. —Tharin Pillay

## Claudia Sheinbaum

PRESIDENT  
MEXICO

Few world leaders can claim to know as much about climate science as Mexico's new President Claudia Sheinbaum, a former academic who contributed to two reports for the U.N.'s Intergovernmental Panel on Climate Change. Sheinbaum pushed forward green policies as Mexico City's mayor, introducing the capital's first electric buses and covering its food market with solar panels. But she owes her political rise to longtime mentor and powerful predecessor Andrés Manuel López Obrador, who funded state oil firm Pemex and enabled the destruction of swaths of rain forest. Sheinbaum now faces conflicting priorities. She has pledged to keep propping up Pemex while also delivering an "ambitious" state-led energy-transition plan. If she follows through, her six-year term could turn a country brimming with renewable potential into a global climate leader.

—Max de Haldevang

## Amy Bowers Cordalis

FOUNDER AND EXECUTIVE DIRECTOR  
RIDGES TO RIFFLES INDIGENOUS CONSERVATION GROUP

*Amy Bowers Cordalis is an attorney, a mother, a conservationist, and a member of the Yurok Tribe of California who grew up fishing on the Klamath River. Bowers Cordalis served as her tribe's general legal counsel in its charge to dismantle four hydroelectric dams that were choking the river and the Indigenous people who depend on it. She helped negotiate with the dams' owner, PacifiCorp, to seal the \$550 million deal to demolish the dams and let the river heal. The dam-removal project, the largest of its kind in history, was completed in August. Bowers Cordalis' Indigenous conservation group, Ridges to Riffles, is now working with the Yurok Tribe to restore the waterway's once thriving fish population. She wrote for TIME about Indigenous climate action.*

The most critical action in advancing the climate agenda is to work directly with Indigenous nations and peoples. Climate, biodiversity, and conservation are deeply intertwined; solutions to the climate crisis often lie in protecting biodiversity and embracing local, nature-based solutions. Indigenous territories hold 80% of the world's remaining biodiversity because these lands, reserved for Indigenous use, have been shielded from development while allowing Indigenous stewardship practices to thrive.

Governments and corporations must move beyond the exploitation of resources and conflict with Indigenous nations, and instead form partnerships that honor Indigenous legal rights, knowledge, and unique political status. The Paris Agreement doesn't go far enough in protecting Indigenous lands and rights. To advance the arc of justice and healing, it is time for the U.S. and all countries to fully implement the United Nations Declaration on the Rights of Indigenous Peoples, ensuring protection for Indigenous peoples' human rights and all of our responsibilities to future generations.

The Klamath River dam removal is a prime example of the tremendous potential of supporting Indigenous-led, nature-based solutions. The \$550 million agreement, made with one of the world's largest power companies, resulted in the removal of four dams

## Prince Harry, Duke of Sussex

FOUNDER  
TRAVALYST

Sustainable travel org Travalyst worked with Google to show the emissions of each flight in search results.

## Mary Jane Melendez

CSO  
GENERAL MILLS

In 2023, General Mills cut direct and indirect emissions by a range of 7% to 12%, without carbon offsets.

## Mads Nipper

CEO  
ORSTED

This year, the world's largest developer of offshore wind power shut down its last coal-fired power plant.





▲  
YUROK LEGAL  
COUNSEL AMY  
BOWERS CORDALIS  
STANDS NEAR THE  
KLAMATH RIVER  
DAM PROJECT IN  
JANUARY 2024

on the Klamath River. The agreement equally respects Indigenous rights, the rights of nature, business interests, and public needs. Removing the dams was less costly than upgrading them, and will result in lower power costs for consumers, improved water quality, and reduced methane emissions. It restores the Klamath Basin ecosystem, which supports a \$500 million annual economy based on agriculture, commercial fisheries, and tourism, and rebuilds the third largest salmon run in the continental U.S. Importantly, it ensures that Indigenous peoples on the Klamath can continue their fishing way of life. This type of collaboration shows that solutions honoring the rights of nature, Indigenous peoples, and business are not only possible, but essential.

Investing in Indigenous nations tends to yield high returns, but still only 1% of philanthropic funds goes to Indigenous nations. The Yurok Tribe, for instance, retains only 0.27% of its aboriginal lands, and many tribal members live below the poverty line, still lacking basic infrastructure like running water and electricity. Despite these challenges, we have led major climate action moments, including the Klamath dam removal,

reintroducing the California condor, and operating a carbon-sequestration project. Many other tribes are doing similar work, but are limited by a lack of resources. While political administrations, CEOs, and NGOs come and go, Indigenous nations remain deeply committed to their homelands. Many tribes follow ancient mandates from the Creator to steward their territories, which have been incorporated into modern tribal law. This long-term commitment makes tribes uniquely positioned to develop and implement local solutions to the climate crisis. Philanthropy and government funding must prioritize Indigenous-led environmental solutions.

We must form partnerships with Indigenous nations, rather than viewing them as obstacles to be conquered. Indigenous peoples' knowledge is essential for addressing the climate crisis. Combining this wisdom with modern technology and resources from the business sector offers a powerful, equitable approach to modernizing economies toward sustainability. Those who have harmed the planet must be held accountable and provide remedies by promoting local and nature-based solutions, and ensuring adequate funding. We must listen to those who live closest to the land and water if we truly want to heal the planet.

**‘Solutions  
honoring  
the rights of  
Indigenous  
peoples and  
business  
are not only  
possible, but  
essential.’**

—AMY BOWERS  
CORDALIS

## Joseph Longo

**CHAIR**  
AUSTRALIAN SECURITIES AND  
INVESTMENTS COMMISSION

Joseph Longo will not stand for greenwashing. As chairperson of the Australian Securities and Investments Commission (ASIC), he's cracking down on companies making misleading statements about their environmental, social, and governance track records. In the 15 months through June, ASIC launched two federal court proceedings and issued over \$123,000 in infringement notice payments. It won its first case in August against investment firm Mercer Superannuation (Australia) Ltd., which was fined \$11.3 million. In September, it won its second when Vanguard Investments Australia was fined \$12.9 million. —Kyla Mandel

## Rosario Dawson

**ACTOR, FOUNDER**  
RIO DAWN FOUNDATION

A galaxy far, far away isn't all that *Ahsoka* star Rosario Dawson is fighting to save. She is also working to protect her home planet. Citing her upbringing for teaching her never to overlook the importance of connecting with nature, she has spent her career pioneering initiatives to create a better world, from producing award-winning documentaries highlighting regenerative agriculture to launching the Rio Dawn Foundation in 2023 to support environmental-justice organizations. Leading up to the 2024 U.S. presidential election, Dawson leveraged her voice through the Too Hot Not to Vote campaign to encourage people to back candidates who are committed to clean energy and climate solutions.

—Megan McCluskey



## David Smith

**CHIEF MARINE  
SCIENCE OFFICER**  
MARS INC.

The candymaker is restoring coral reefs in Indonesia, Saudi Arabia, and the Maldives.

## Sarah Finch

**CAMPAIGNER**  
WEALD ACTION GROUP

Thanks to Finch, the U.K. Supreme Court ruled new fossil-fuel projects must disclose their emission impacts.

## Stephen Roe Lewis

**GOVERNOR**  
GILA RIVER INDIAN  
COMMUNITY

The community's first solar canal began generating power this fall.

Q

WHERE SHOULD  
CLIMATE ACTIVISM  
GO IN THE  
NEXT YEAR?

**'Climate activism  
needs to rebuild the  
pre-COVID climate  
strike momentum.'**

**Tzeporah Berman**  
FOSSIL FUEL NON-PROLIFERATION  
TREATY INITIATIVE

**'We need to stop the  
destruction [of rain forests].  
This could be the last time  
in history when it is still  
possible to save the world  
before it is too late.'**

**Juan Julio Durand**  
VICE PRESIDENT  
JUNGLEKEEPERS

**'Engagement and  
collaboration across the  
movement should be a  
priority for the next year.'**

**Adam Met**  
EXECUTIVE DIRECTOR AND  
FOUNDING MEMBER  
PLANET REIMAGINED AND AJR

**'We must advocate for  
significant investments in  
economic development for the  
most vulnerable countries to  
build resilient economies.'**

**Wanjira Mathai**  
MANAGING DIRECTOR FOR AFRICA  
AND GLOBAL PARTNERSHIPS  
WORLD RESOURCES INSTITUTE





## Emily Eavis

**ORGANIZER**  
**GLASTONBURY FESTIVAL**

Emily Eavis is proving that it's possible to host a major festival sustainably—and successfully. Under her leadership as co-organizer of the Glastonbury music festival, the annual event was run entirely on green energy for the first time last year. “We power our 200,000-capacity event entirely without the use of fossil fuels,” she says. “If we can do this for our pop-city in this rural space, why can't cities and larger businesses be run this way too?” This year Eavis also reported that 99% of festivalgoers' tents were taken home. It's a vision that Glastonbury has been championing for decades as its organizers encourage attendees to build a more sustainable world, from taking public transit to the event to voting in elections. “I really do believe that progress—the power of change—lies in our hands,” she says. “Without the belief that we can make a difference and steer the course away from disaster, it'll be difficult to lead change. As climate activists, we need to inspire people with optimism by keeping our goals accessible and inclusive, because we still have a chance to create a meaningful impact and correct the mistakes of the past in a way which supports and empowers people.” —*K.M.*

## Boyan Slat

**FOUNDER AND CEO**  
**THE OCEAN CLEANUP\***

In addition to polluting the seas, ocean plastic may be sabotaging the planet's natural climate defenses by interfering with phytoplankton, microscopic marine organisms that help oceans absorb carbon. Boyan Slat, of nonprofit The Ocean Cleanup, aims to rid the ocean of 90% of floating plastic by 2040. But, he adds, “I believe we can do it faster.” Slat's optimism is surprising, given the scale of the challenge. Its first full-scale cleanup system,

launched in 2018, did not effectively capture plastic and eventually broke. A later version caught plastic, but not very well.

Slat says those early failures helped the nonprofit land on its current more successful formula. It places contraptions that catch would-be ocean plastic from rivers. Meanwhile, ships pull a giant net that sweeps plastic from the ocean's garbage patches—areas where currents meet and plastic waste accumulates. The two-pronged approach has already seen over 21,000 tons of plastic removed

since 2019. At current rates, The Ocean Cleanup estimates that it could clean the entire Pacific garbage patch, an accumulation of ocean plastic off the coast of California, for \$7.5 billion. But Slat says the plan is to save money and resources by halting sea operations for a year, beginning in 2025, and to use the time to perfect its technique of predicting where clusters of ocean plastic lie. “The broom is ready. Now it's about knowing where to sweep,” Slat says. “We're going to invest one year to save five.” —*Harry Booth*



## Niilo Edwards

**CEO**  
**FIRST NATIONS MAJOR PROJECTS COALITION**

Thanks to FNMPC, a 5B Canadian-dollar program is catalyzing Indigenous stakes in energy projects.

## Uka Eje

**CEO**  
**THRIVEAGRIC**

The startup's carbon-sequestration project will help smallholder farmers in Nigeria earn more.

## Laura Clarke

**CEO**  
**CLIENTEARTH**

KLM's “sustainable aviation” ads were ruled misleading in a precedent-setting court case brought by ClientEarth.

## Michael Cohen

**CHAIR**  
**CLIMATE ACTION 100+ GLOBAL STEERING COMMITTEE**

The group pushed India's largest crude oil and natural gas firm to set a decarbonization plan.

## Lesley Ndlovu

**CEO**  
**AFRICAN RISK CAPACITY**

The company is providing fast insurance payouts to climate-change victims across the African continent.

## DEFENDERS

## Christina Bu

SECRETARY GENERAL  
NORWEGIAN EV ASSOCIATION

When it comes to electric-vehicle adoption, Norway is putting the rest of the world to shame. It's the only country where the majority of car sales are EVs. And this year marked the first time that EVs outnumbered gasoline-powered cars on their roads. One key to Norway's success has been its robust EV driver's association, Norsk Elbilforening (Elbil for short). Over the past 10 years, Elbil's secretary general Christina Bu has grown the group's membership to more than 120,000, making it the largest consumer-based EV association in the world. The group has pushed tirelessly for policies that incentivize EV ownership, including the country's very successful "polluter pays" tax structure, in which high-emission cars are taxed the most and zero-emission cars the least. Taxes are only part of the equation, though. Elbil has worked to make EV charging easier. Thanks to Elbil's lobbying, the government mandated last year that all new fast chargers must allow credit-card payments. All of this has undoubtedly helped speed Norway's transportation revolution. As of September, roughly 96% of all new cars sold in the country are electric. And Bu is confident that by next year, it'll be 100%. "Norway's story shows that it is not really about people's attitude," she says. "It's all about regulation, taxes, and incentives." —Jessica Hullinger



## Jad Daley

CEO  
AMERICAN FORESTS\*

His conservation group is working with the U.S. Forest Service on a \$20 million land-restoration effort.

## Madhur Jain

CO-FOUNDER AND CEO  
VARAHA CLIMATEAG

Varaha helps sequester carbon by paying smallholder farmers to use regenerative agriculture practices.

## LEADERS

## Dickon Mitchell

PRIME MINISTER  
GRENADA

DICKON MITCHELL, THE Prime Minister of Grenada since 2022, knows all too well the devastation a natural disaster can visit upon a small island nation like his. He also understands why climate resiliency is so urgent for countries facing financial and structural ruin. This July, when Hurricane Beryl made landfall on the Grenadian islands of Carriacou and Petite Martinique as a Category 4 tropical cyclone, the destruction was immense: roofs torn from homes, boats scattered across the land, public water supplies and health infrastructure decimated. Three people were killed. Because of the scale of that wreckage, the Caribbean Catastrophe Risk Insurance Facility (CCRIF) made a record \$44 million payment to Grenada to help it rebuild—and that allowed Mitchell to activate a first-of-its-kind debt clause postponing \$30 million in repayments from the Grenadian government to private investors, including U.S. investment firms Franklin Templeton and T. Rowe Price. While the debt will still be paid back later, the near-term flexibility allowed Mitchell's government to increase its liquidity and put the additional resources to disaster relief—a form of climate resiliency that had never before been tested.

Mitchell's historic move may not have been possible if not for storms that rocked the nation 20 years prior. Grenada was pummeled in 2004 by Hurricane Ivan, which killed 37 people and damaged 90% of the homes in its path. Less



than a year later, Hurricane Emily struck, compounding an already strained recovery effort. The tab for rebuilding was equal to 200% of the nation's GDP at the time, catapulting Grenada into a cycle of debt on which it ultimately defaulted. In 2015, as Grenada negotiated with creditors, the country introduced disaster clauses to prevent crippling debt from exacerbating the pain of rebuilding in the future. The creditors ultimately agreed that if Grenada received an insurance payout exceeding \$15 million from CCRIF, it would trigger the suspension of certain debt payments—precisely what happened this year. "With

**'Small nations can develop sophisticated solutions.'**

—DICKON MITCHELL

BUI: MONA HAUGLOD—TEDX/COURTESY PHOTO; MITCHELL, CROW: COURTESY PHOTOS





▲  
MITCHELL WITH WRECKAGE  
FROM HURRICANE BERYL  
IN ST. PATRICK ON  
GRENADA'S NORTH SIDE

international partnership we developed innovative financial tools ... which allow us to receive financial payouts and recover more swiftly from natural disasters," Mitchell told the U.N. General Assembly in September as he advocated for more relief. "These efforts reflect more than just economic policy; they show that small nations like Grenada can develop sophisticated solutions to the challenges we face."

The world has taken notice. Based on Grenada's rebuilding efforts, countries like Spain are now advocating that wealthy nations across the globe offer these types of pause clauses to help developing countries recover. It's a loan structure the World Bank has recently been working on as well. Meanwhile, Mitchell has been active

at home and abroad leading the conversation about climate resiliency. In the wake of Hurricane Beryl, he took over as the rotating chairman of CARICOM, a regional bloc of Caribbean nations, and stressed the urgency of finding solutions to climate disasters. He also formed a task force within his government focused on securing climate justice and compensation for the nations most vulnerable to destructive storms. In doing so, he has invited the international community to partner with Grenada in developing resilience policies. "We have lived through the destructive power of hurricanes, which can erase decades of progress in just a few minutes, but we have also seen that when communities are prepared—we can save lives and livelihoods," Mitchell told the U.N. "We are a living lab on the front lines of a global challenge."

—JAY BOUCHARD

## Michael Crow

PRESIDENT  
ARIZONA STATE UNIVERSITY†

The first step to solving a problem is understanding it. Michael Crow, as president of Arizona State University (ASU), is making sure America's future changemakers understand climate change. Nearly two decades ago, under his tenure, ASU launched the world's first school of sustainability. This year, all incoming students must take a sustainability course. "This approach will better reflect the interdisciplinary knowledge all students need to be successful in a rapidly evolving world," Crow says. The year 2024 has, indeed, been notable. In January, ASU received \$15 million from the National Science Foundation to lead a research hub, in collaboration with industry and local communities, to develop regional solutions on carbon capture, water security, and renewable energy. The school also launched an innovative land-based coral research and propagation facility in Hawaii in April—the largest coral nursery of its kind—with the aim of restoring 120 miles of reefs off the Big Island. It's a testament to the role academic institutions can play. "The world's universities are an exceptional, singularly powerful source of knowledge, innovation, and action to guide us to a better world position. But governments, companies, NGOs, and foundations tend to look at universities through very narrow lenses," he says. "They fail to fully understand what universities can bring to the table, so opportunities are missed." —Kyla Mandel



† DONORS TO ARIZONA STATE UNIVERSITY INCLUDE TIME CO-CHAIRS AND OWNERS MARC AND LYNNE BENIOFF.

## Maya Malarski

SENIOR POLICY MANAGER  
GAVI, THE VACCINE ALLIANCE

It's becoming abundantly evident that with rising global temperatures come increased health risks, be they from increased populations of disease-carrying mosquitoes and ticks or greater incidence of waterborne diseases like cholera from flooding. Now, for the first time, this reality is helping inform the vaccine alliance known as Gavi's five-year investment strategy—which plays an impactful role in global health decisionmaking, guiding vaccine deployment around the world. Responsible for this push is Maya Malarski, a senior manager on Gavi's policy team who led the climate criteria for Gavi's Vaccine Investment Strategy released this summer. Not only will this guidance help countries in adapting their immunization programs to climate change, it will also support the decarbonization of immunization efforts and Gavi's own carbon footprint. "Climate change and health are intricately linked," she says. "Outbreaks are likely to become increasingly common due to deforestation and loss of natural habitats as animals are being forced into closer contact with humans, increasing the risk of spillover of new pathogens that humans don't have immunity against. With our current trajectory it's a question of when, not if, the next pandemic will occur." As such, she urges world leaders to keep investing in vaccines and health care systems in a bid to minimize the effects of climate change. —Kyla Mandel



## Nili Gilbert

VICE CHAIRWOMAN  
CARBON DIRECT

Nili Gilbert is helping firms around the world, including Meta, JetBlue, and JPMorgan Chase, manage their carbon emissions. It's no small task for the vice chairwoman of Carbon Direct. Working with Microsoft, the

organization this July released new criteria for high-quality carbon-removal projects. This will help ensure carbon-credit buyers will be able to better evaluate their investments. Beyond her work at Carbon Direct, Gilbert serves as chair of the Glasgow Financial Alliance for Net Zero's advisory panel of

technical experts. "To effectively and rapidly address the climate challenge," she says, collaboration is key. From business leaders to science experts, "intellectual diversity and focused multi-sector action will help all of our institutions accelerate efforts and find greater success in doing so." —K.M.

## Adam McKay

DIRECTOR AND PRODUCER  
YELLOW DOT STUDIOS

Adam McKay, producer of the satirical 2021 climate-disaster film *Don't Look Up*, is clear on where he stands. In 2022, the Academy Award-winning director gave the Climate Emergency Fund \$4 million, and he now sits on its board of directors. Last year, he opened Yellow Dot Studios to produce comical ads and videos challenging climate disinformation. "There is something

so powerful about just saying the truth," he said in a July interview on Climate Chat. McKay is showing it's possible to marry entertainment and climate activism, and he has more in the works to prove it: a film based on David Wallace-Wells' *The Uninhabitable Earth*, and a documentary about storm chasers who have a "frontline view of our changing climate." McKay hopes laughter will jolt people out of their "fugue state" and make the media stop what he calls the "Great Pretend."

—Chad de Guzman

## Tom Steyer & Katie Hall

CO-EXECUTIVE CHAIRS  
GALVANIZE CLIMATE SOLUTIONS\*

Galvanize Real Estate launched last year to decarbonize buildings.

## Monica Grasso

CHIEF ECONOMIST  
NOAA

Grasso authored the U.S. National Climate Assessment's first-ever chapter on climate's economic impacts.

## Jack Dangermond

PRESIDENT  
ESRI

Esri is the global leader in geographic information system technology, providing vital data for decisionmaking.

\*INVESTORS IN GALVANIZE CLIMATE SOLUTIONS INCLUDE TIME CO-CHAIRS AND OWNERS MARC AND LYNNIE BENIOFF.



**Q**  
**IF YOU COULD  
 STAND UP AND TALK  
 TO WORLD LEADERS  
 AT THE NEXT COP,  
 WHAT WOULD  
 YOU SAY?**

**‘Tap your  
 country’s greatest  
 natural resource—  
 the ingenuity of  
 young people.’**

**Michael D. Smith**  
 CEO  
 AMERICORPS

**‘Investment flows  
 need to dramatically  
 increase and be spread more  
 equitably across the world.’**

**Bruce Douglas**  
 CEO  
 GLOBAL RENEWABLES  
 ALLIANCE

**‘This is a global  
 emergency and will  
 not be solved by any  
 one sector alone.’**

**Matthew Eby**  
 FOUNDER AND CEO  
 FIRST STREET

**‘Mitigating methane  
 is the fastest, most effective  
 way to reduce temperature  
 in the short term.’**

**Marcelo Mena-Carrasco**  
 CEO  
 GLOBAL METHANE HUB

## Phil MacDonald

FOUNDER AND MANAGING DIRECTOR  
 EMBER

In the four years since Phil MacDonald founded global energy think tank Ember, it has become a go-to organization for open-source data about the clean-energy transition. That includes helping inform the British Labour Party’s landmark commitment to clean energy announced this year. As U.K. Energy Secretary Ed Miliband said, Ember’s “work on creating a zero-carbon power system was rigorous, thorough and insightful. It had

an invaluable impact on Labour’s thinking and our plans for a clean power system by 2030.” Whether it’s the U.K. or other nations, there is no time to waste, says MacDonald. He urges countries to deploy more clean energy, and quickly: “Next year the rest of the world needs to catch up with China’s stratospheric growth in wind, solar, nuclear, and many other clean technologies, if we are to successfully tackle climate change.” Reducing methane

emissions from coal mines is another area where major progress can be made, but is often overlooked by governments. If there were one thing he could ask of world leaders at this year’s U.N. COP29 climate conference, he says, it would be a global commitment to stop these leaks. “The world is now tantalizingly close to peak emissions, which may even come this year,” MacDonald says. “This takes us into uncharted territory for humanity. Activists can make sure world leaders know that the decline of oil, gas, and coal industries is now inevitable.” —K.M.



## Matthias Ratheiser

CEO  
 WEATHERPARK GMBH

The urban climatology firm advised on Frankfurt’s new skyscraper development plan.

## John Bosco Isunju

SENIOR LECTURER  
 MAKERERE UNIVERSITY

Isunju led Uganda’s Health Adaptation Plan, accounting for climate impacts.

## Emily Li

CHIEF EMPLOYEE  
 BENEFITS &  
 WELLNESS OFFICER  
 AXA HONG KONG  
 & MACAU

The firm launched the market-first Heatwave Parametric Insurance.

## Vanessa Chan

**DIRECTOR OF THE OFFICE OF  
TECHNOLOGY TRANSITIONS AND CHIEF  
COMMERCIALIZATION OFFICER  
U.S. DEPARTMENT OF ENERGY**

Most people probably have not heard of the Office of Technology Transitions at the U.S. Department of Energy, but it's played an outsize role in bringing climate technologies to market. That's thanks to the work of Vanessa Chan, who leads the office. Last year she spearheaded the department's Pathway to Commercial Liftoff reports, which, for the first time, provide a national road map for how to decarbonize 11 different sectors, from geothermal and hydrogen to chemicals and cement.

"All of us need to move from our traditional way of doing business. Boards of companies need to empower CEOs to invest in new technologies that may yield earnings years from now," Chan says. "[Our] reports highlight the exact kind of investments that the private sector can be making in partnership with other players to help us reach the tipping point needed to bring the costs of our technologies down."

The Pathway reports are already influencing government and private-sector clean-energy investments. In June, the office announced \$41.4 million in federal funding for 50 clean-energy projects. This type of bold thinking, she says, is vital across the world.

—Kyla Mandel



### Tony Goldner

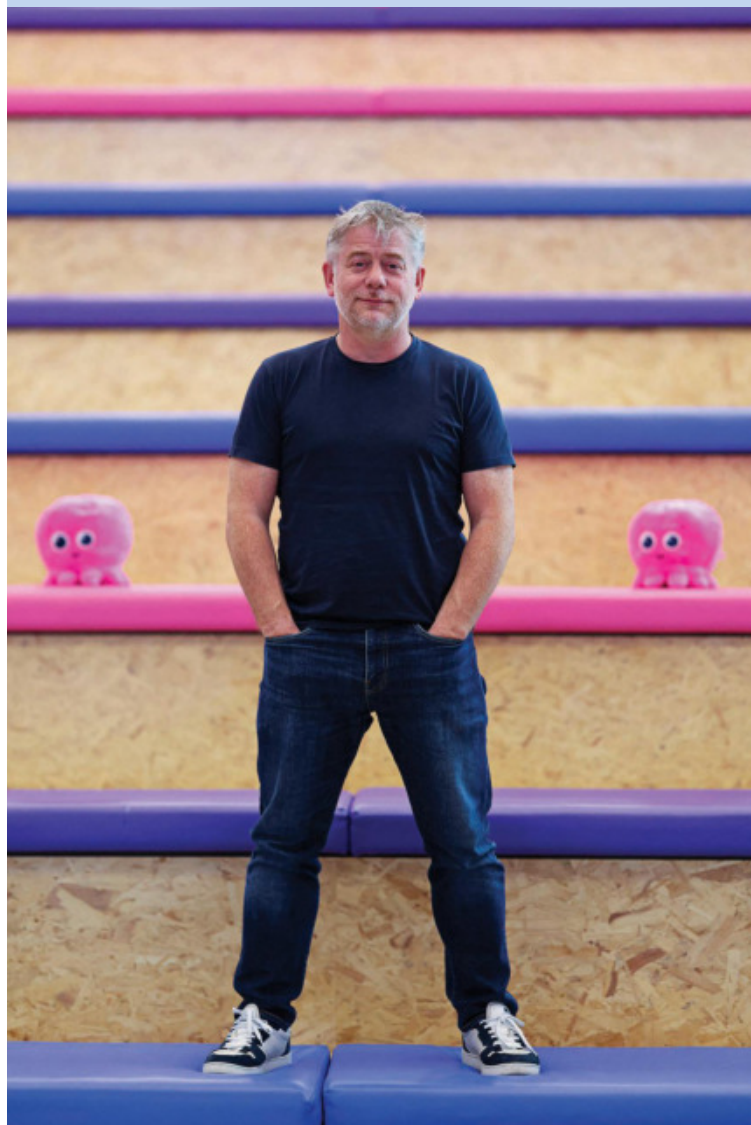
**EXECUTIVE DIRECTOR  
TASKFORCE ON  
NATURE-RELATED  
FINANCIAL  
DISCLOSURES (TNFD)**

In 2023, TNFD got 320 businesses to commit to nature disclosures.

### Jesse Jenkins

**ASSISTANT PROFESSOR  
PRINCETON UNIVERSITY**

Research by Jenkins, head of Princeton's ZERO Lab, has informed climate policy and private-sector innovation.



## Greg Jackson

**FOUNDER AND CEO  
OCTOPUS ENERGY GROUP**

*In the race to curb emissions, Greg Jackson of U.K.-based Octopus Energy Group believes the answer lies not in asking consumers to pay more, but in harnessing technology to "align their interests with those of the planet." At the heart of the group's strategy is dynamic pricing, enabled by Kraken, its power-grid operating system. When there's an abundance of wind, for example, Octopus Energy has paid customers to use energy. When there is little wind*

*or sun, and the grid relies on fossil fuels, the company alerts customers that it will pay those who curb their energy usage. Doing so, it says, saved over 960,000 lb. of CO<sub>2</sub> from being released in the U.K. last winter.*

Conventional wisdom is that customers don't want to think about their energy provider. "Right at the beginning, I said, 'I want to challenge that assumption,'" Jackson says. Octopus has continued finding intelligent ways to take full advantage of



◀  
**JACKSON AIMS TO  
MAKE CLEAN ENERGY  
MORE APPEALING  
TO CONSUMERS**

*these swings in supply, for example by offering customers with electric vehicles a way to charge their cars only when electricity is exceptionally cheap.*

Octopus Energy Group, which is valued at \$9 billion, has licensed Kraken to utility providers in 17 countries including the U.K., Australia, and much of mainland Europe. In May, it signed its first North American customer, Saint John Energy, in New Brunswick, Canada. And since 2022, Octopus Energy has partnered with U.K. developers to bring its technology to Zero Bill Homes—houses kitted with batteries and solar, to which it promises no energy bills for at least five years. In September, the company announced its intention to create 100,000 such homes by 2030. Jackson writes for *TIME* about affordable clean energy.

The single most important thing governments and policymakers around the world can do to fight climate change is to drive the electrification of transport and heating. Only by electrifying everything can we take full advantage of the power of the sun and the wind. This not only benefits the climate but also consumers' pockets. Clean technologies like electric cars and heat pumps are not only better for the planet, customers also prefer

**‘We need to  
think long-  
term, beyond  
election cycles.’**

—GREG JACKSON

them over their carbon-heavy counterparts.

The fossil-fuel crisis sent shock waves around the globe, leading to skyrocketing energy prices that saw millions of households struggling to pay their energy bills. No one has ever weaponized solar or wind energy. So if this global trauma has taught us anything, it's that we need to build vastly more renewables—and we need to do it quickly.

We pay millions of dollars a year to wind generators to turn off when there's too much electricity on the grid—valuable green energy that is being wasted because the system is not fit for purpose. What we need is an overhaul of our energy market and to introduce price signals so energy demand moves closer to energy generation. Price signals like this exist in many other industries—think supermarkets or airlines—and indeed in energy in lots of other economies, including Norway.

By reforming our wholesale energy markets, electricity costs in renewables-rich areas like Scotland would plummet, driving economic growth whilst creating a more resilient, future-proof energy system.

The time for isolated action is over. The stakes are higher than ever, with parties opposing strong climate action gaining ground across Europe. We're at a critical juncture, and the only way forward is to accelerate electrification and build a greener, cheaper energy system. Instead of competing with other countries, we should share learnings and technology and work together to build a global clean-energy future. We must cut the red tape, speed up renewable projects, and reform the wholesale energy market. We need to think long-term, beyond election cycles and national borders.

## Gaurav Sant

FOUNDER AND CEO  
EQUATIC

Gaurav Sant founded Equatic, a startup building North America's first commercial-scale ocean-based carbon-removal facility. Led by Sant, who is also the director of UCLA's Institute for Carbon Management, Equatic enhances the ocean's natural ability to trap and store carbon by running an electrical current through captured seawater at its facility. (The seawater is later returned to the ocean.) This year the company started manufacturing a breakthrough anode that promises to allow it to also use this process to safely produce green hydrogen that can be sold to help make carbon removal affordable at scale.

Sant has joined others in calling for a global carbon tax, and stresses the urgency for business. "More than anything, the world needs a definitive signal that climate-change mitigation is vital, immediate, and not optional, and that this goal will require technological adoption of low-carbon solutions," Sant says. "We are not sufficiently focused on the foundational sectors other than energy that impact our everyday lives—things like cement, steel, and plastics, which we cannot do without. These sectors need much more financial and policy support to innovate and decarbonize at scale."

Equatic expects its Canada plant to remove an estimated 109,500 metric tons of CO<sub>2</sub> and produce 3,600 metric tons of green hydrogen in its first year. —Jessica Hullinger





## Alejandro Agag

FOUNDER AND CHAIRMAN  
FIA FORMULA E

Alejandro Agag is on a mission to make motorsport sustainable. He's now seen household Formula One names like Porsche and McLaren join FIA Formula E, and as of the 2022–23 racing season, Formula E had reduced its emissions—across operations, energy usage, and supply chain—by 27% collectively compared with its 2019 baseline. This year, Agag announced the launch of the world's first hydrogen-fueled car race: Extreme H. But he knows electric cars alone can't solve the climate crisis. "The arrival of AI will lead to a significant increase in electricity use, which was not fully accounted for in previous climate models," he tells TIME. "In the long term, only [nuclear] fusion can supply enough energy for an increasingly warm and technologically advanced world." Until that milestone, he echoes calls for a global carbon tax. "We can harness the power of the free market to drive the economy toward greener options," he says.

—Kyla Mandel

## Sandeep Nijhawan

CEO  
ELECTRA

In 2020, Sandeep Nijhawan co-founded Colorado-based Electra. Its mission: to decarbonize iron- and steelmaking. Iron production is a hot, energy-intensive process. Today, the steel industry is responsible for about 7% of all global carbon emissions (90% of which come from making iron).

But through a novel electrochemical process, powered by renewable energy, Electra is trying to change that. In March, it launched a pilot plant to produce iron at the temperature of a cup of coffee. And in April, the company was awarded over \$2.8 million from the U.S. Energy Department to support this effort, which brings with it the promise of making steel with 80% less emissions at half the cost of traditional methods. Nijhawan, for his part, contends that a global price on carbon is needed to push companies to adopt tech like Electra's and accelerate industrial decarbonization. —K.M.



## Wes Edens

FOUNDER  
BRIGHTLINE

In April, Brightline broke ground on its zero-emissions high-speed train line through California.

## Andrew Savage

VP OF SUSTAINABILITY  
LIME

The e-bike-share company that popularized electric micromobility has cut its carbon intensity by 60% since 2019.

## Colin Wessells

FOUNDER AND CO-CEO  
NATRON ENERGY

Natron, the only commercial sodium-ion-battery maker in the U.S., plans to build a gigafactory in North Carolina.

Q  
WHAT'S THE MOST IMPORTANT CLIMATE LEGISLATION THAT COULD PASS IN THE NEXT YEAR?

**'Permitting reform would jump-start the delivery of clean energy infrastructure.'**

**Bret Kugelmass**  
FOUNDER AND CEO  
LAST ENERGY

**'We need to focus on implementing the climate legislation that has already been decided on.'**

**Robert Falck**  
CEO  
EINRIDE

**'Strengthen the supply chain for renewable technologies to ensure materials are available at scale.'**

**Cindy Taff**  
CEO  
SAGE GEOSYSTEMS

**'Provide additional support for U.S. manufacturers transitioning to clean energy production.'**

**Andrea Pedretti**  
CO-FOUNDER AND CTO  
ENERGY VAULT





## Mary Powell

**CEO  
SUNRUN**

While many major residential solar companies have floundered recently, SunRun is not among them. Under CEO Mary Powell's leadership, the company has become the largest developer of residential solar in the U.S., responsible for

a fifth of all home systems installed. And this August, it became the first solar-plus-storage company to surpass 1 million customers. The secret to its success lies in part in its expansion beyond solar power into energy-storage systems, with solar and battery storage making up more than half of its sales as of August, up 12% from

the year prior. This year, SunRun also launched partnerships with Ford and Tesla to turn the F-150 Lightning trucks and Tesla battery wall systems into virtual power plants, allowing homes and the grid to tap into stored energy. "The grid is not ready for the future we're sprinting toward," Powell says. "We can't afford to wait." —*K.M.*

## Kerry Xuefeng Chen

**FOUNDER AND CEO  
ATRENEW**

ATRenew, a Shanghai-based e-recycling company, works globally to help people better dispose of smartphones and other electronics. Founded by Kerry Xuefeng Chen in 2011, the company refurbishes and sells preowned devices, allowing customers to securely trade in products while reducing the estimated 82 million tons of e-waste expected to be produced worldwide each year

by 2030. Chen has grown the business significantly in recent years, inking partnerships with tech giants like Apple and focusing on international growth, with subsidiaries AHS Recycle and AHS Device supporting self-service recycling kiosks in Japan and Europe. A report from ATRenew noted the company sold more than 32 million preowned products last year, a number that is expected to grow as the Chinese government leans further into e-recycling. This year, the company's earnings grew by nearly 30%. —*Jay Bouchard*

## Shawn Qu

**CEO AND CHAIRMAN  
CANADIAN SOLAR**

Qu's company opened its first U.S. factory in Texas in late 2023, with another coming to Indiana in 2025.

## Ryan Gilliam

**CEO  
FORTERA**

In April, Fortera opened its first commercial plant to make low-emissions cement in California.

## Tim Latimer

**CO-FOUNDER AND CEO  
FERVO ENERGY**

The geothermal-energy company powers some Google data centers and could soon power 2 million homes in Utah.

## Andrew Forrest

**EXECUTIVE CHAIRMAN AND FOUNDER  
FORTESCUE, MINDEROO  
FOUNDATION, AND TATTARANG**

Australian billionaire Andrew Forrest is one of the business world's most prominent climate advocates. As head of the global mining company Fortescue, he has used his platform to sharply criticize the oil and gas industry and raise the bar for corporate sustainability. In September, Forrest outlined an ambitious climate-transition plan for Fortescue focused on eliminating fossil fuels from the firm's operations by 2030 without relying on carbon offsets or carbon capture, a strategy Forrest dubbed Real Zero. "Only Real Zero targets are science-based and can genuinely limit warming to 1.5°C," Forrest tells TIME. "Net Zero 2050 is an absolute disaster for mankind, serving only one master: the fossil-fuel sector. I call on all governments and corporate leaders to ask themselves one simple question: When will you stop burning fossil fuels? We must all push our governments and companies to go Real Zero by 2040."

To force companies' hands, Forrest suggests that governments adopt legally binding carbon budgets, which would require all proposed projects to disclose carbon intensities, and be approved based on them. This, he believes, would push companies to more quickly transition to green energy sources, in turn boosting that sector over fossil fuels. "We will show that [Real Zero by 2030] can be done profitably, rapidly, and reliably—everywhere," Forrest says. —*Jessica Hullinger*



## Megan O'Connor

CO-FOUNDER AND CEO  
NTH CYCLE

Megan O'Connor founded Nth Cycle in 2017 to address two problems: a growing volume of electronic waste, and a limited domestic supply of critical minerals needed for the energy transition. "[We must build] sustainable, domestic supply chains for critical metals," O'Connor tells TIME. "Every EV and renewable energy storage system relies on metals like nickel, cobalt, and lithium. Yet, the vast majority of U.S. lithium and cobalt are refined and imported, often from regions with environmentally damaging practices. With global demand for these metals expected to rise by 500% by 2050, we can't continue relying on outdated, high-emission refining methods." Fast-forward to 2024, and her company has become the first in the U.S. to extract nickel and cobalt on a commercial scale from scrap and refine it to be used in clean technologies. Nth Cycle's modular system, called the Oyster, can be added on to existing recycling facilities and manufacturing plants, and reduces greenhouse-gas emissions by 90% compared with traditional mineral mining. "We can either replace one set of destructive practices with another," O'Connor says, "or we can lead the way in creating a truly sustainable future. This isn't a side issue—it's central to building the world we all envision." —Jessica Hullinger



### JB Straubel

FOUNDER AND CEO  
REDWOOD MATERIALS

Redwood's battery-recycling client list now includes BMW, Ford, Toyota, Volkswagen, Audi, and Panasonic.

### Nedjip Tozun

FOUNDER AND CEO  
D.LIGHT

d.light outfitted 30 million homes across 72 countries in Africa and Asia with solar power to cut kerosene use.

## Melanie Nakagawa

CSO  
MICROSOFT

*Melanie Nakagawa has built her career around championing sustainability: from working as an attorney with the Natural Resources Defense Council, to advising Secretary John Kerry on climate change as a foreign policy priority, to helping the U.S. rejoin the Paris Agreement. Now, as chief sustainability officer at Microsoft, a role she took up in January 2023, she oversees Microsoft's clean-energy expansion. In May, the company inked an estimated \$10 billion deal to help develop 10.5 gigawatts of new renewable-energy capacity around the world—enough to power 1.8 million homes. With that price tag, it's estimated to be the world's largest such corporate commitment to clean-energy expansion.*

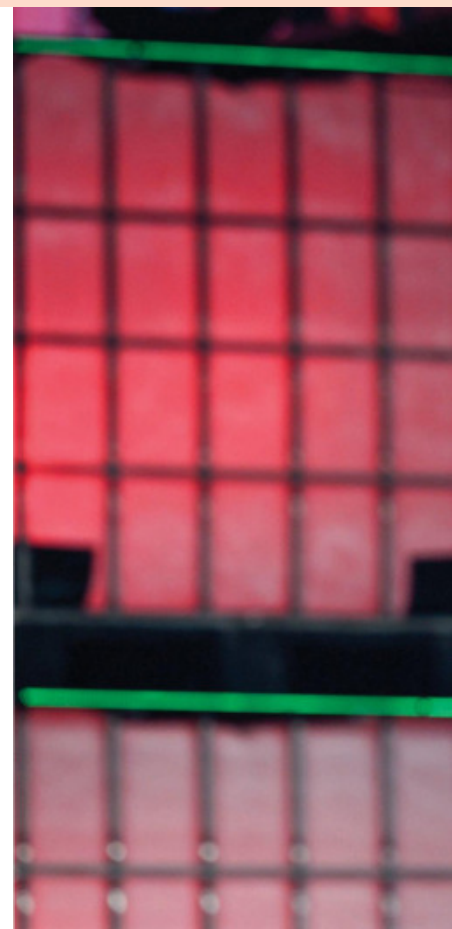
*The company is also using more energy. Its AI pivot drove Microsoft's annual emissions to rise 30% since 2020. To that end, Nakagawa is helping deepen Microsoft's effort to address the energy and water use of data centers, supporting the growth of lower-carbon materials (think steel and concrete) for building data centers, and improving the energy efficiency of AI and cloud services themselves. And in a further push to cut the company's emissions, Nakagawa announced in May that it would be asking its "high-volume suppliers" to use 100% carbon-free electricity by 2030. Nakagawa writes for TIME about how she sees the future of sustainability, globally and personally.*

As someone who drives an electric vehicle, I have become more aware of when to charge

it to optimize for the availability of clean energy. This small habit is one that I am beginning to expand into more parts of my life—specifically, becoming more energy aware in my activities. I believe that the combination of awareness and the accessibility of tools empowers individuals to see themselves as decisionmakers and play an important role in addressing climate change.

Achieving climate goals requires a solid foundation of clean-energy infrastructure—the world must shift to carbon-free energy sources like wind, solar, hydro, geothermal, and nuclear before 2050. Global policy changes and voluntary commitments are working to drive demand, and we need the market supply to deliver on the clean-energy transition.

At the same time, we must scale our existing progress.







▲  
NAKAGAWA  
SPEAKS ABOUT  
CLIMATE  
SOLUTIONS AT  
WEB SUMMIT  
LISBON 2023

We believe investments in clean-energy infrastructure, and new technologies like generative AI, can accelerate this progress. Countries with the cleanest grids will have a competitive edge for 2030 and beyond, attracting investment from companies like Microsoft. We encourage governments to adopt firm carbon and electricity policies, including carbon reporting, multisector carbon-reduction policies, grid decarbonization, carbon removal, flexible grid, transmission planning, clean-energy equity, and workforce training for jobs in the clean-energy economy.

Today, concrete and steel are the two most emissive industrial sectors, accounting for over 10% of global emissions. Demand for concrete and steel is expected to grow 20% to 30% by 2050.

**‘Countries with the cleanest grids will have a competitive edge.’**

—MELANIE NAKAGAWA

In order to keep up with demand and decarbonize these critical infrastructure industries, global supply of green steel alone will need to grow 38 times by 2030. To help accelerate the global development of climate solutions that do not yet exist and deploy the capital needed to help build them, such as in the low-carbon materials sector, in 2020, Microsoft launched the Climate Innovation Fund with a \$1 billion commitment. Since then, Microsoft has deployed over \$760 million over the past four years into a global portfolio of more than 50 investments, including companies working on materials, but there’s more work to do. Through this work we are seeing exciting new technologies and solutions emerge, but still not enough funding being dedicated to this sector.

## Harmen van Wijnen

CHAIR, EXECUTIVE BOARD  
PENSIONFUND ABP

Harmen van Wijnen is chairman of ABP, Europe’s largest pension fund. This year ABP divested from fossil fuels, selling some \$10.8 billion worth of oil, gas, and coal assets in an industry-leading move. The group also changed its environmental, social, and governance investing strategy, tightening the rules to weed out “companies that are inextricably linked to climate change and cannot or do not want to change.”

Van Wijnen sees the move as good business. “Our goal is to deliver a good and reliable pension for our participants. Therefore, solid returns are a must,” he tells TIME. “This makes it all the more important for us to invest in a responsible and sustainable manner in a stable and resilient economy.”

In an unusual move, ABP also announced plans to build an offshore wind farm in the North Sea, which would “cover 8% of the current Dutch demand for affordable electricity, while minimizing ecological effects and contributing to biodiversity.” Van Wijnen predicts this will also lead to good returns for participants. —J.H.



## Karen Pflug

CSO  
INGKA GROUP (IKEA)

If there's any company that's proving it's possible to grow as a business while reducing its emissions, it's Ikea. As the furniture manufacturer's chief sustainability officer, Karen Pflug can tout the major achievement of reducing Ikea's climate footprint by 24.3% in 2023 (compared with its 2016 baseline) while growing its revenue by 30.9%.

Pflug uses her position to push different sectors to work together in the climate fight. "We all have a role to play, and collaboration between business, governments, and society is more essential than ever," she says. She has worked with the public and private sectors on climate solutions, particularly as the company encourages the reuse of its products: it is lobbying the Canadian government to end its tax on secondhand goods, and this fall it rolled out its Ikea Preowned pilot program in Oslo and Madrid.

She thinks of climate change as a human-rights issue. "We need to do more in recognizing the importance of simultaneously tackling climate change and inequality," she says. "As well as being guided by science, when taking climate action, we need to keep people at the heart of our actions and take a coordinated approach that covers people and the planet. Climate change is contributing to significant involuntary displacement of people around the world and their universal rights to food, water, health, housing, work, and life." —Kyla Mandel



## Sumant Sinha

FOUNDER  
RENEW

India is home to a fast-growing renewable-energy sector, and Sumant Sinha is at the center of it. Since he founded ReNew in 2011, the company has become one of the country's top renewable-energy producers, building wind and solar plants across India to help meet its burgeoning energy demand.

"Faster electrification is key to transitioning to a low-carbon economy," he says. "We must aim for electricity to meet half of global energy demand by 2040."

With his ReNew platform, Sinha has become a leading voice in India and around the world advocating for the policies necessary to advance the energy transition—and he likes to think big. He is calling for a unified carbon market "with a single global carbon price that reflects the true costs of carbon emissions to society." That will help move money "to areas where the potential for reducing emissions is the highest," he says. And he has called for the creation

of a new international climate-finance institution solely focused on emissions reductions that can get "the best bang for the buck."

This year, Sinha was appointed to co-chair the World Economic Forum's Alliance of CEO Climate Leaders, a group of more than 130 CEOs from some of the world's largest companies. Sinha's mission is to help these companies move forward with their own decarbonization efforts while also pushing policymakers for helpful rules.

"You see good momentum in that group," he says. "It gives you hope."

—Justin Worland

**Wes Morrill**  
CYBERTRUCK LEAD  
ENGINEER  
TESLA

In one year, the controversial Cybertruck has become the best-selling EV pickup in the U.S.

**Hassatou N'Sele**  
CFO  
AFRICAN DEVELOPMENT  
BANK GROUP (AFDB)

In January, AFDB launched a landmark \$750M bond aimed at climate solutions.

**Rodrigo Costa**  
CEO  
REDES ENERGÉTICAS  
NACIONAIS

Portugal's energy supplier generated 95% of the country's electricity from renewable energy.



**Q**  
WHAT'S ONE SUSTAINABILITY EFFORT YOU PERSONALLY WILL TRY TO ADOPT IN THE NEXT YEAR?

**'[I will] buy fewer things. We need to change unnecessary consumption habits.'**

**Marisa Drew**  
CSO  
STANDARD CHARTERED BANK

**'Make sure that the banks we supervise directly fully account for climate and nature-related risks.'**

**Frank Elderson**  
EXECUTIVE BOARD MEMBER  
EUROPEAN CENTRAL BANK

**'I plan to switch to an electric vehicle.'**

**Andrew Chang**  
HEAD OF UNITED AIRLINES VENTURES  
UNITED AIRLINES

**'Teaching (and showing) my children that day-to-day decisions can add up to making a real impact.'**

**Amber Hardy**  
DIRECTOR OF SUSTAINABILITY  
ALDI U.S.

## Jim Rowan

PRESIDENT AND CEO  
VOLVO CARS

Jim Rowan is shepherding Volvo Cars through the auto industry's rocky transition away from fossil fuels. Despite market turbulence, Volvo's electric-vehicle sales in the first half of 2024 were up 53% year over year, and its small EX30 electric SUV is one of the best-selling EVs in Europe. In June, the company issued the world's first EV passport, providing an early model for tracking the origins and carbon footprint of battery components. "Our studies show that a steady, consistent supply of clean energy across the value chain is essential to minimize the carbon footprint of EVs," says Rowan. "The singular, most urgent action we have in our power to do right now is to accelerate the transition from fossil fuels. The world needs more energy, so everyone has to play their part, especially institutions. Governments must prioritize clean energy supply, jobs,

and infrastructure through policy and investments, while the financial community should redirect capital to support this shift. This transition is critical for electric cars to realize their full potential in combatting climate change."

On a personal level, Rowan errs toward being nature-positive. "Nature is our greatest ally in this fight, [not only] through critical carbon dioxide absorption by forests and oceans, but quite simply because it supports life on earth," he says. "I personally am focusing on understanding our biodiversity footprint and educating myself on how to mitigate negative impacts. For starters, our recently launched Volvo for Life Fund exists exactly to provide the means to restore and regenerate nature, particularly in areas where we have an operational presence."

Cutting his industry's reliance on oil and gas, though, is his primary focus. In March, Volvo announced it had manufactured its very last diesel-powered car.

—Jessica Hullinger



## Pilar Cruz

CSO  
CARGILL

In 2023, Cargill, the U.S.'s largest private company, exceeded its 2025 carbon-emission reduction targets.

## Hiroyuki Mori

EVP  
JAPAN ORGANIZATION FOR METALS AND ENERGY SECURITY (JOGMEC)

JOGMEC is driving down methane emissions across Asia.

## Ester Baiget

CEO  
NOVONESIS

Novonesis employs enzymes and natural processes for climate solutions, like breaking down PET plastic.

## Majid Al Suwaidi

CEO  
ALTÉRRRA

Decarbonizing the global economy will require trillions of dollars in investment, including in emerging economies and developing countries. But major financiers have been slow to pony up big dollars for projects in the Global South, fearing a range of financial risks.

Altérra, with Majid Al Suwaidi as CEO, is charting a path to change that. The fund, founded at the global climate conference COP28 in Dubai last year with an initial commitment of \$30 billion from the United Arab Emirates, is designed to become what he has called “the go-to fund for the climate transition.” Since the announcement, Altérra has secured deals to invest the funding with a range of prominent money managers focused on green strategies, including Brookfield and BlackRock.

Crucially, though, the fund sets aside \$5 billion for projects in the Global South. That money will be used not only to invest in promising deals but also to serve as capital that attracts other investors by taking on more of an investment’s risk. “Transforming the global economy towards a net-zero and climate-resilient pathway will require a transformation of the climate-finance landscape,” Al Suwaidi said in a statement in February. “Altérra will play a key role in that transformation.”

Around the world, climate-finance leaders are watching closely. Altérra’s success could clear the path for a wave of private investment in the Global South. —Justin Worland



## Ellen Jackowski

CSO  
MASTERCARD

Increasing economic growth while reducing your environmental footprint is the capitalist holy grail of sustainability. And under Ellen Jackowski’s leadership as chief sustainability officer of Mastercard, the company is on its way to doing exactly that. As of April, Mastercard announced that in 2023 it had grown its net revenue by 13% while decreasing its emissions by 1% compared with the year prior. This includes significantly addressing emissions along its

supply chain—these scope 3 emissions were down 40% in 2023 compared with its baseline year of 2016. All of this puts Mastercard in a steady position to hit its interim 2025 climate targets on its way toward net-zero by 2040.

“A critical climate solution that deserves more attention and funding is the integration of financial inclusion with climate action,” says Jackowski. “This strategy transcends merely decoupling growth from

emissions—it couples growth with inclusion, channeling resources directly to those most affected by climate change. By doing so, we build climate resilience and foster economic prosperity. As extreme weather events intensify, we must ensure businesses and communities can thrive in their aftermath. The key lies in achieving last-mile financial access, particularly for the billion climate-vulnerable people still financially excluded.” Mastercard, she says, aims to connect high-risk communities to the digital economy.

—Kyla Mandel

## Pam Cheng

CSO  
ASTRAZENECA

The company’s Breztri inhaler cuts hydrofluorocarbons, powerful greenhouse gases used as a propellant.

## Michelle Tan

VP  
SINGAPORE ECONOMIC DEVELOPMENT BOARD

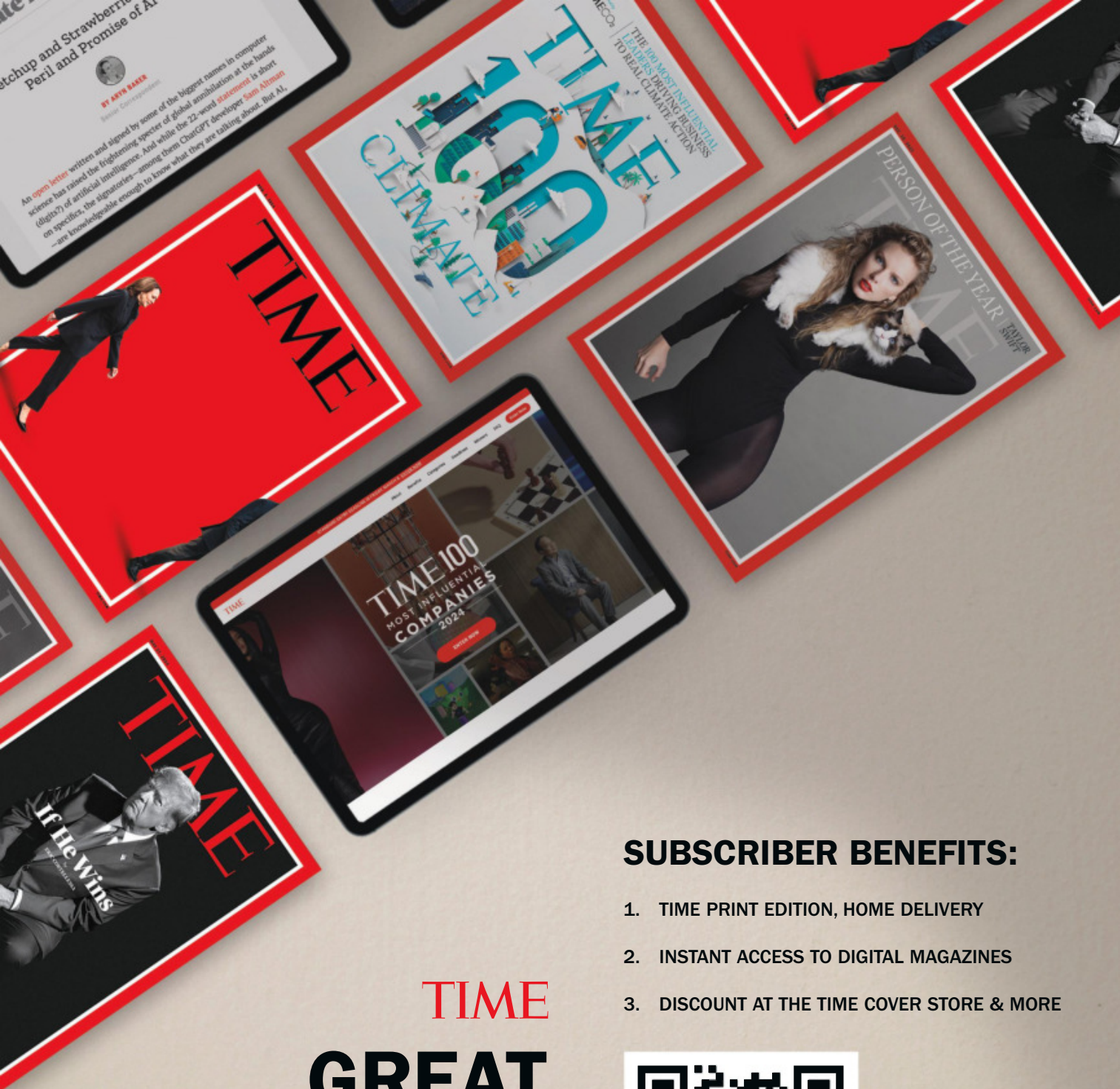
Singapore is attracting new business with accessible, transparent carbon market tools.

## Karen Fang

GLOBAL HEAD OF SUSTAINABLE FINANCE  
BANK OF AMERICA

Fang leads the bank’s effort to mobilize \$1.5 trillion in sustainable finance capital by 2030.





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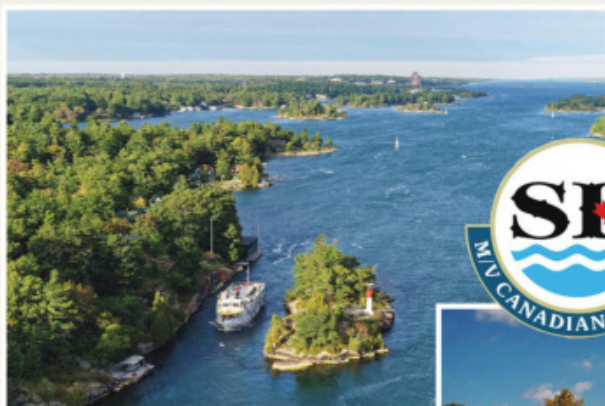
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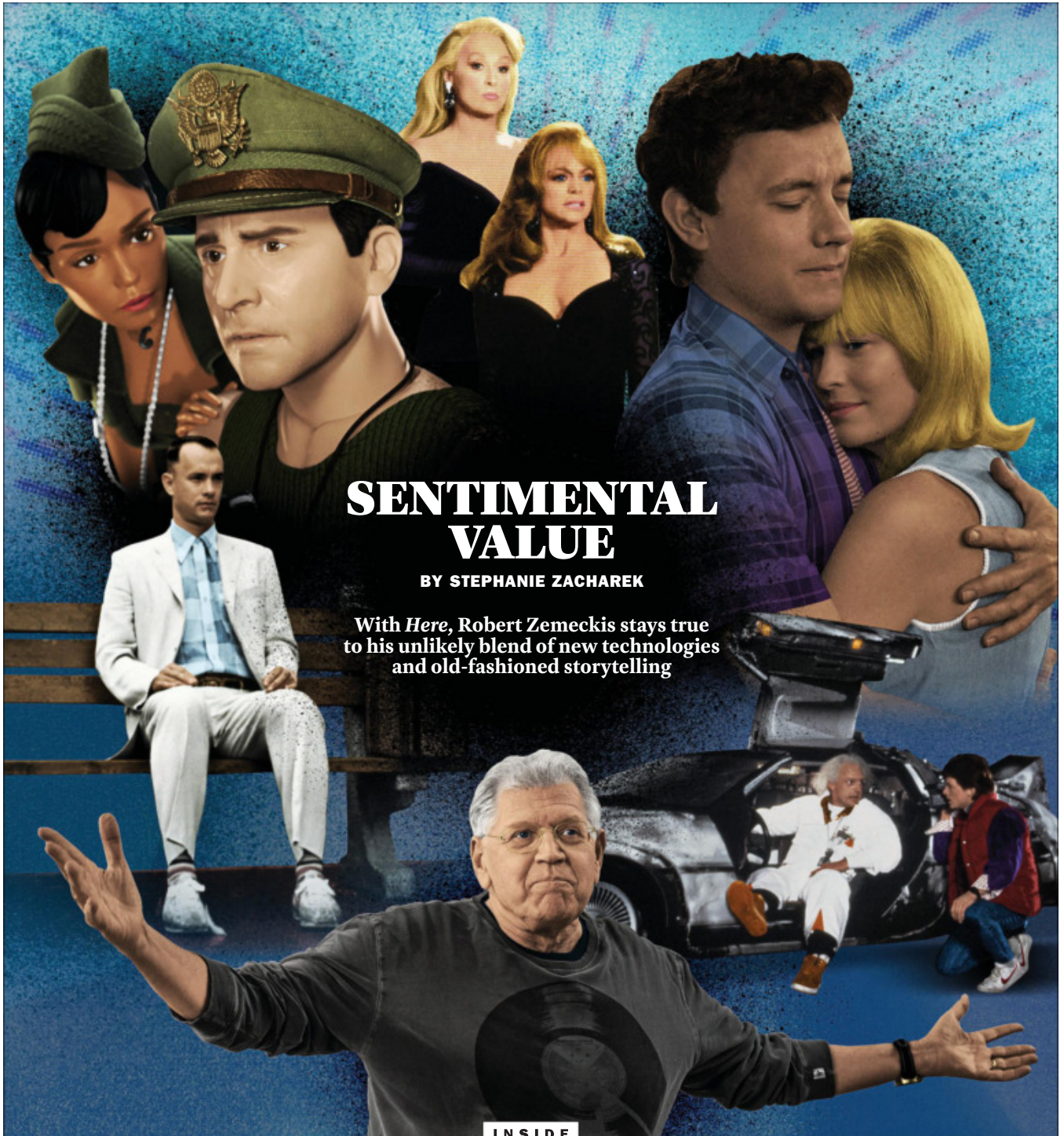
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# Time Off



## SENTIMENTAL VALUE

BY STEPHANIE ZACHAREK

With *Here*, Robert Zemeckis stays true to his unlikely blend of new technologies and old-fashioned storytelling

INSIDE

THE SONGS OF *WICKED*  
TAKE FLIGHT ONSCREEN

ARTIST EL ANATSUI TRIES  
SOMETHING NEW IN PHILADELPHIA

A TV DRAMA BRINGS  
THE TROUBLES TO LIFE

**R**OBERT ZEMECKIS' *HERE* IS THE MOST UNFASHIONABLE movie of 2024—which is exactly what's beautiful about it. In a world where even those who profess to love movies largely stream them at home, *Here* is a picture that demands big-screen real estate. It's inventive and confident filmmaking from a veteran director whose most recent features have performed modestly at the box office or, worse, sunk with barely a trace. It's so unabashed in its desire to make us feel something that it runs the risk of being called sentimental—some early reviews have labeled it as such. It's the kind of movie that a whole family—from young teenagers to nonagenarians—could trek out to see on a Sunday or holiday. And it reunites two stars, Tom Hanks and Robin Wright, who helped make Zemeckis' 1994 *Forrest Gump* such a resonant success.

In 2024, all these pluses are almost minuses, relics of things we no longer look for in movies. But Zemeckis—who, in a career spanning more than 40 years, has hit some high highs and a few rather low lows—is optimistic that audiences will find their way to *Here*, not just because he wholeheartedly believes in it, but because he knows it's a miracle it got made in the first place. "It defies everything that's happening in the corporate whatever," he says in a Zoom call from Los Angeles, "[among] whoever it is that makes decisions about what movies should be made." Maybe because his last film to receive a traditional theatrical release, 2018's tender, innovative, and mildly strange *Welcome to Marwen*, failed to find an audience, he knows a miracle when he sees one. "Hey, the truth is that I could never make any of the movies I made, today. Not a single one." Why? "Because," he says, with deadpan understated confidence, "they're too original."

Maybe that sounds like hubris. But for someone who knows, provably, how to connect with moviegoers in an actual theater—as he did with *Forrest Gump*, with *Back to the Future* and its sequels, with pictures like *Cast Away* and *Who Framed Roger Rabbit*—it's really just a reckoning with the state of moviegoing today. Most of us watch movies in isolation, which Zemeckis sees as a huge problem. It's easy to forget what it feels like to laugh as part of a larger audience of human beings, or to be part of a crowd of viewers who allow themselves to be swept along in a wave of emotion. And though we think we want to see something original, do we really? If so, the mountains of product being made from already-familiar IP means we're out of luck.

What chance does a movie like *Here* have in a world like that? Zemeckis, more than anything, sounds grateful that he'll have a chance to find out.

**ADAPTED FROM RICHARD MCGUIRE'S** 2014 graphic novel, a landmark for its visual inventiveness, *Here*—set in a single room of one house, and covering centuries' worth of life in that exact location—is, from a technical standpoint, unlike any other film ever made. The camera is stationary, as it used to be in the days of silent film. But in *Here*, that stillness feels exhilarating and modern, given that what we see within the frame moves and changes not



▲  
Hanks and Wright in *Here*, left, and with Zemeckis on set, right

just with passing days, years, and decades, but with eons. We see a young couple enter this room—the Second World War has just ended, and these two are looking forward to building a life together. But we've also seen the ground on which this house was built as an early home to dinosaurs (who trample over a couple of prehistoric eggs as they valiantly try to outrun death) and later to North America's Indigenous peoples, who fall in love and build families just as our post-World War II couple will do (though they're not nearly as fully fleshed out as characters). Across centuries the landscape shifts from barren earth to verdant, flowering fields—the story flashes backward and forward in time, though it never leaves this relatively small patch of space. Within this single frame, small interior squares pop up to show what was happening in this exact spot decades ago, or what might happen in a few decades' time.

From the minute Zemeckis picked up McGuire's novel, he saw it as a film. But getting the result he wanted wasn't easy, not even for a filmmaker known for his fluency in special effects. "When I started getting my team together and described the style of the movie I was going to make, everyone's reaction was, 'Well, that won't be a problem.' And it turned out to be maybe the most difficult movie we ever made," Zemeckis says, "a gigantic puzzle."

Nestled within that puzzle is the story's heartbeat. Our postwar couple,





Al and Rose, are played by Paul Bettany and Kelly Reilly. They give birth to a son, Richard, who, from his teenage years to old age is played by Tom Hanks. While he's still in high school, Richard meets and falls in love with Robin Wright's Margaret. She gets pregnant; the two marry, living with Al and Rose ostensibly only until they can afford a place of their own, though that day never comes. The extended family lives under one roof, and not always happily. There are births, deaths, major illnesses, and marital frustrations. Wright and Hanks anchor the film's drama, and to play the younger and older versions of their characters, their faces and bodies have been enhanced digitally.

The de-aged versions of Hanks and Wright are admittedly a little disorienting, especially at first. But Zemeckis—who, with films like *The Polar Express* (2004) and *Beowulf* (2007), has long been a proponent of performance-capture and other digitally advanced technologies—bristles at the suggestion that audiences might think of Hanks and Wright's appearance as “uncanny.” He hates that word. The only reason people might have that response, he says, is because they know they’re seeing a movie illusion. He explains that the effect is nothing more than digital makeup; he finds the results perfect, and perfectly believable, given how much de-aging technology has improved since Martin Scorsese used it in *The Irishman*, in 2019. (The de-aging in *Here* was

accomplished via an AI technology known as Metaphysic Live.)

**BUT WHEN PRESSED** to acknowledge that some viewers might find that very perfection unsettling, Zemeckis concedes that the effect might require a small leap of imagination. “It’s an intellectual exercise,” he says. “An audience might be going, ‘Oh, how can that be? I know they’re not that age.’” But test audiences, he says, weren’t overly bothered. “They quickly got over it.” And while he acknowledges that unchecked AI presents a danger to actors’ livelihoods, he considers the technology used in *Here* to be completely defensible from an artistic standpoint. “AI is a catch-all phrase, because what I’m doing is just using really fast computing to create digital makeup. I’m not creating any kind of avatar or anything.”

In the end, Zemeckis might be right that the sight of a “young” Hanks and Wright, reunited, may be enchanting enough to carry audiences along. But what *Here* really captures is the sense that time seems to stretch before us

**‘I think people who use the word sentimental just don’t like the fact that they were moved.’**

—ROBERT ZEMECKIS, DIRECTOR

endlessly when we’re young; it’s only when we stop and look back that we realize time isn’t our own, to use or control. The spaces we fill today were filled by others before us, and will be filled by someone else tomorrow—though another way of looking at it is that all beings are interconnected across dimensions. Common experiences unite us: Our parents fall ill or simply age, and we must care for them. Babies are born at inconvenient times, but we make it work. People we love leave us behind. Our children grow up to live their own lives. At one time or another, we all ask the same question: Where did the time go?

The dazzling construction of *Here* gets at the unanswerability of that question. There’s something searching and wistful about this movie; it couldn’t have been made by a young person. In adapting McGuire’s book, Zemeckis worked with his frequent collaborator (and *Forrest Gump* screenwriter) Eric Roth, and though the story stretches across centuries, it’s particularly affecting in the way it captures life in mid- to late 20th century America. When Al brings out his home-movie camera, circa 1960, the family squints into the glare of the light bar necessary for shooting indoors: this is how midcentury parents captured our happiest moments, by nearly blinding us. The family TV in the corner hits the high points of each era (the Beatles on *The Ed Sullivan Show*) or at least nods at the weird stuff that gets stuck in our brains (the opening sequence of *CHiPs*).

But any film that tangles with big human feelings risks being characterized—to come back to that all-too-convenient word—as sentimental. Zemeckis is ready for that. “I think people who use the word *sentimental* just don’t like the fact that they were moved. It makes them scared, and I think they’re lashing out at a feeling that makes them uncomfortable.” Watching movies in isolation, removed from that ripple of communal feeling, has done us no favors. Maybe it’s time we relearned how to feel uncomfortable, together—to bring it back into fashion, before it goes extinct. □

## FEATURE

# No rest for the songs of *Wicked*

BY ANNABEL GUTTERMAN

THE WICKED WITCH OF THE WEST HAS BEEN A FIXTURE in American culture for nearly 125 years. After coming to life in 1900 with L. Frank Baum's novel *The Wonderful Wizard of Oz*, she rose to prominence onscreen in 1939, portrayed by Margaret Hamilton as a sinister old lady intent on ruining an innocent girl's wish to go home. Decades later, Gregory Maguire gave her an origin story, introducing her as Elphaba in his 1995 novel *Wicked*. That, in turn, was adapted into a hit Broadway musical in 2003—one of the most lucrative and longest running. Now, Elphaba's story is coming to the big screen with director Jon M. Chu's two-part adaptation, starring Cynthia Erivo as Elphaba and Ariana Grande as her perkier counterpart Glinda. The first installment arrives in theaters on Nov. 22.

*Wicked* is much more than a simple origin story. Told through music and lyrics by the Oscar-winning composer Stephen Schwartz, it explores love, betrayal, and heartbreak as Elphaba navigates her complex relationship with the future Glinda the Good. Schwartz, whose other musical credits include *Godspell* and *Pippin*, has been involved with *Wicked* since its inception onstage. Countless vocalists have interpreted these songs, on Broadway and on tours around the world, but the film brings new opportunities to dive even deeper into the world of Oz. That meant some songs were expanded or restructured—a challenge that Schwartz was excited to tackle with his collaborators.

TIME spoke to Schwartz about key songs in *Wicked*, from Elphaba's first big number to the dramatic cliffhanger, from their origins to how they translate onscreen.

## “The Wizard and I”

*Wicked*'s third song follows Elphaba as she realizes her life is about to change. Madame Morrible (Oscar winner Michelle Yeoh in the movie), the headmistress of Shiz University, has seen Elphaba's magical talents, and announces that she will write to the Wizard so the two can meet. This is perhaps the first time Elphaba is noticed for something that doesn't have to do with the electric green color of her skin. It's one of the most emotional moments in the show as Elphaba stands alone in the middle of the stage and sings.

But that bare-bones approach made Schwartz worry about how the song would present on film. For the movie, Chu leaned into the fantastical elements of the story to convey Elphaba's sudden flood of hope. Schwartz says that the director's clever solution managed to make the song feel more cinematic while staying true to its purpose. He was also struck by Erivo's performance. “Cynthia can sing anything, she's gifted like a virtuoso with an instrument,” he says. “It was really interesting and impressive how she brought who and where the character was at that particular point in the story into the sound of her voice.”

## “What Is This Feeling?”

Early in the process of writing the show, Schwartz was having trouble with this number, which finds Elphaba and Glinda as reluctant roommates who can't stand each other. After conferring with his collaborator Winnie Holzman, who wrote the book for the *Wicked* musical (and later co-wrote the film's screenplay), he cracked it on the fifth try. Holzman had the idea to write a “falling in hate” song. She told Schwartz that instead of a song where two people instantly fall in love, they should instantly fall into loathing, but in such an intense way that it somehow still feels good.

Initially, Schwartz wrote a song more resembling a ballad, but during readings he could see that it wasn't working. “I realized the idea was right, but it needs to be really high energy,” he says. He went home after one reading and wrote the song overnight. That version made it to Broadway—and Schwartz notes it is one of the songs in the movie that most closely resembles how it is performed onstage.

**“The only rule for me is that it has to feel organic.”**

STEPHEN SCHWARTZ

## “Dancing Through Life”

One of *Wicked*'s longer songs, “Dancing Through Life” covers a lot of ground. Fiyero (*Bridgerton*'s Jonathan Bailey), the partying prince who keeps getting kicked out of different schools, arrives on the scene and gets everyone together to dance at the Ozdust Ballroom. He introduces his philosophy for life: “Nothing matters but knowing nothing matters/ It's just life/ So keep dancing through.” As he sings, major developments are happening for all the key characters, including Glinda gifting Elphaba the pointed hat that eventually becomes her signature look.

Though it's Fiyero's song, Elphaba and Glinda share a dance at the end, and their relationship is forever changed. They let their walls come down and stop seeing each other as enemies. “It's very exciting when you can tell a big story moment wordlessly, just with music and movement,” Schwartz says. “That's something Jon Chu was able to achieve in a wonderful way because of closeups, and things you don't have onstage.”





### “Popular”

After the breakthrough in their relationship at the dance, Glinda sings to Elphaba that she wants to help her become popular. The bubbly tune, punctuated by Glinda’s promises to fix her friend’s hair and show her how to flirt, came to Schwartz easily. He wanted it to sound like the cheerleaders in high school that he had crushes on (“the unattainable girls”), but slightly offbeat compared with your typical bubblegum pop. “I made it odd rhythmically, instead of straight-forward,” Schwartz adds. “The accents come in strange places. There’s a yodel in the title when she does ‘Pop-youuu-lar.’”

For the movie, Schwartz and his collaborators wanted to update the rhythm, but he remembers that Grande was adamant that they stay true to the original. It was important that all changes to the song felt like they came from Glinda’s motivations, rather than Grande’s own vocal stylings. “She does little inventive things within it, but I think they are strongly character-based,” Schwartz says. “That was something she was very insistent on.”

^  
Grande and Erivo bring their own flair to the beloved roles of Glinda and Elphaba

### “One Short Day”

The musical number that is most changed for the film is the one that brings Elphaba and Glinda to Oz. Before Elphaba meets the Wizard (Jeff Goldblum), she and Glinda cram in as many exciting activities as they can on the trip. “Winnie and I had this idea that when the girls go to Oz, it would be like one of those tourist books,” Schwartz explains. “If you only have one day in the Emerald City, what should you see?” They end up on a whirlwind tour, where they are enchanted by the cultural offerings. “One Short Day” also includes a mention of the Wizard and his supposed powers in a brief play-within-a-play.

In the movie, this portion is expanded to delve into the history of Oz, including details about the city’s ancient book of spells known as the *Grimmerie*. Schwartz says the new part of the song also highlights how the Wizard is using propaganda and spreading misinformation about himself to the citizens of Oz.

### “Defying Gravity”

The Act I closer and one of *Wicked*’s most memorable songs comes as Elphaba is being chased by the Wizard’s guards. The man she had so trusted has just betrayed her—and he’s gotten all of Oz to turn against her. In response, she vows to fight back. But the walls are closing in, and Glinda is begging Elphaba to apologize, hoping that things can return to normal. Instead, Elphaba levitates for the first time. Onstage, she is hoisted into the air as she sings.

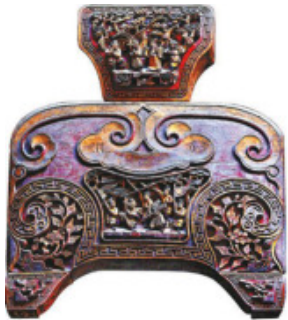
“I wanted you to feel this power coming up through the ground, inhabiting her, and then her owning her power,” Schwartz says. When Erivo sang “Defying Gravity” in the movie, Schwartz admired how restrained she was—until the very end. The final note, a riff that has had a life well beyond *Wicked*, becomes Elphaba’s battle cry. “It’s fun for me to hear what the different choices are,” Schwartz says. “The only rule for me is that it has to feel organic, it can’t feel like you’re doing a riff on *American Idol*. It needs to feel like it comes from the gut. I certainly think Cynthia achieved that.”

## CHINA WATCH

PRESENTED BY CHINA DAILY 中国日报

## The delicacy is in the details

Relationship between ancient merchants and craftspeople has left a stunning legacy of art



From top: Historical memorial arches are prime examples of Huizhou's stone carving.

PROVIDED TO CHINA DAILY  
A wood carving work at a Qing Dynasty (1644-1911) residence.  
FANG LONG / FOR CHINA DAILY

BY WANG RU  
and ZHU LIXIN

For Kuai Zhenghua, restoring ancient wood carvings starts out as a piece of detective work and requires experience, intuition and imagination.

Once when he was restoring a piece on which were traces of an elephant engaged in farming, he knew it was the depiction of a story of the legendary ruler Shun, believed to have lived more than 4,000 years ago.

Kuai, 62, a national-level intangible cultural heritage inheritor of Huizhou wood carving, says: "It's a tale about the cultural importance of filial piety. In the story, Shun's display of filial obedience touches heaven and results in elephants farming for him. The legendary ruler Yao, said to be Shun's predecessor, hears the story and visits Shun to ascertain whether his character qualifies him to take over his throne, before passing the mantle of leadership to Shun."

"Although there are often many missing parts, clues remain. For example, even if the heads of some figures are gone, you can still see their feet and clothing. Men often have bigger feet than women. Farmers don't

wear long robes, but officials do. Women's costumes often have ribbons. Since these carvings usually depict legends, with clues like these you can figure out which stories they are about."

Kuai, of Huangshan, Anhui province, says that once he understands a carving's content he can restore it. The pieces he has worked on over 40 years once decorated the buildings of Huizhou, a historical prefecture, which straddled the border between southern Anhui and northern Jiangxi provinces and covered the area of modern-day Huangshan.

Stone carvings, brick carvings and wood carvings in Huizhou, collectively referred to as the three carvings, have been integral components of Huizhou's architecture since the Ming Dynasty (1368-1644). Different types of carving work in coordination with another and are used in different parts of buildings, giving rise to the elegant, exquisite decor for which Huizhou architecture is known, says Chen Zheng, deputy secretary-general of the Huangshan Intangible Cultural Heritage Research Association.

The historical buildings are often found nestled in mountainous areas. Residential build-

ings, one of the most important typologies, are enclosed by walls and look simple from the outside, but inside they are open, spacious and intricately decorated.

Chen says the popularity of the three carvings is closely related to the rise of Huizhou's merchants, a class reputed for their honesty and morality during the Ming and Qing (1644-1911) dynasties.

Since Huizhou is a mountainous area with few flat areas for farming, its people often left the region to do business at a young age. When they achieved success and wanted to build homes for their twilight years, lack of land meant they could not build bigger buildings, so instead they resorted to luxurious decoration to display their hard-earned prosperity.

Wood carving is widely believed to be the most important among the three carvings. "People often say, 'Even if the walls collapse, Huizhou houses will not,' because their wooden structures make use of *sunmao* (mortise-and-tenon) joints," Chen says. "That's why, for interior decoration, the wooden beams and window lattices are the primary choices, and that's where wood carving comes into play."

Brick carvings typically adorn the entrances of ancient

## Traditional medicine catches interest of the young

BY ZHAO RUINAN

In July there was a long line in the outpatient hall of Jiangxi Provincial Hospital of Traditional Chinese Medicine in the city of Nanchang. Many of the patients, including a lot of young people, were coming for *sanfutie*.

*Sanfutie*, a TCM treatment, is administered during *sanfu*, the hottest days of summer. The process involves placing

small, square herbal plasters or bandages on various areas of the back and neck.

"*Sanfutie* is usually applied in cycles of three years, requiring continuous application over this period to achieve better results," said Xu Maolin, 31, who tried *sanfutie* for the first time last year and is now in her second year of treatment.

The *sanfu* period refers to the hottest days based on the Chi-

nese lunar calendar. This year it occurred from July 15 to Aug. 14. According to traditional Chinese medicine theory, *sanfu* days are an excellent time for preserving health and healing diseases.

"I've had allergic rhinitis since I was little," Xu said. "Last year, on a colleague's recommendation, I tried *sanfutie* treatment for the first time and my rhinitis improved a lot."

Techniques such as massage

and acupuncture are becoming increasingly popular among young people.

Health-related spending ranked third on the list of consumer preferences among those aged 18 to 35 last year, a report published by China Media Group in May said. A report on Gen Z's spending on nutrition in 2022 indicated that young people are actively engaging in health-conscious consumer behavior.





From above:  
Huizhou's  
multilayered  
brick carvings  
usually feature  
a three-  
dimensional  
presentation.  
PHOTOS

PROVIDED TO  
CHINA DAILY  
Kuai Zhenghua,  
62, a master of  
Huizhou wood  
carving.  
WANG RU /  
CHINA DAILY

residences to signify the owners' status, he says, and stone carvings are commonly found on pillar bases and are more prevalent in ancestral temples and on *paifang*, memorial arches.

Chengzhi Hall in Yixian county of Huangshan is a classic example of Huizhou architecture. The former residence of Wang Dinggui, a Qing Dynasty salt merchant, is known for its outstanding wood carvings.

One beam in the main hall is decorated with a carving depicting a Tang Dynasty (618-907) prince's party, with many officials in attendance. The carving is intricate, and all the figures are painstakingly carved, including a servant in one corner brewing tea, and one in another corner cleaning the ears of an official.

The carvings depict Wang's wish to become an official, his drive for prosperity in business, his wishes for the longevity of elderly relatives and his desire for his descendants to prosper, says Huang Jie, vice-president of the Yixian Huihuang Tourism Development Group, responsible for promoting scenic spots in the area.

The stone carvings at the Wu family ancestral temple in Shexian, another county, depict

10 famous views of West Lake in Hangzhou, Zhejiang province, Chen says. Legend has it that a family member who grew prosperous doing business in Hangzhou sought to fulfill his elderly mother's desire to witness his success, and recruited skilled artisans to replicate Hangzhou's scenic beauty on the bluestone boards of their ancestral temple, thus allowing his mother to experience the city's splendor without undertaking the arduous journey to get there.

The exquisite carvings were the work of Huizhou artisans, a group known during the Ming and Qing dynasties for their skills in various art forms including carving and woodblock printing.

Their success was tied to the support of Huizhou merchants, who devoted a great deal of wealth to the best materials. Artisans were given plenty of time to build the splendid homes in which the merchants sought to retire. As a result, craftspeople had both the money and the time to work meticulously and satisfy their patrons, Chen says.



Top: Huizhou's wood carving is known for its smooth simple lines and exquisite techniques. FANG LONG / FOR CHINA DAILY  
Above: A memorial arch features intricate stone carvings. PROVIDED TO CHINA DAILY

He makes particular mention of the wood carvings in a residence in the village of Lucun in Yixian county, said to have been worked on by two artisans for nearly 20 years, a demonstration of the determination and devotion of Huizhou merchants to have the perfect dwelling, no matter the cost.

Although Huizhou's craftspeople were highly skilled, apart from being known for their accomplishment, most failed to leave their names in history. But their legacy continues to shine.

Urban residents are said to be spending on average more than 1,000 yuan (\$140) a year on health and wellness, with the 18 to 35 age group accounting for 83.7% of the total.

Zhou Yunxian, 86, former chief physician at the Institute of Acupuncture and Moxibustion Hospital of the China Academy of Chinese Medical Sciences in Beijing, said she has observed the growing numbers of younger people seeking TCM treatment in recent years.

"TCM is highly effective in

treating diseases, especially in relieving symptoms such as pain. Nowadays young people are under a lot of pressure, and unhealthy habits such as staying up late and prolonged sitting at work often make them feel physically uncomfortable.

"Neck and lower back pain have become common occupational ailments among many office workers. Acupuncture and massage can effectively alleviate these symptoms."

Medicinal drinks such as *suanmeitang* (sour plum juice) and

goji berry tea are being drunk more and more by young people.

In November last year in a survey conducted by the newspaper China Youth Daily in conjunction with a website, 74.3% of the young people surveyed said they believed they had an awareness of TCM health preservation. Ninety-four percent said they had some understanding of TCM health-related concepts, and a similar number said they had tried TCM diagnostic and treatment methods.



A medical worker gives health suggestions to a young patient at an event for thermal acupuncture in Nanchang, Jiangxi province, on Aug. 8. PROVIDED TO CHINA DAILY

ART

## Portrait of the artist in his ninth decade

BY BELINDA LUSCOMBE/PHILADELPHIA

AS A CURATOR AT THE PHILADELPHIA MUSEUM OF ART, Eleanor Nairne is very particular about how an artwork should be placed. “I always say that you have to ask the work if it’s sat comfortably,” she says. “The work will tell you if it is or not.” So it is that on a Tuesday in October, when the museum is closed, Nairne is having one of her most stressful workdays ever, supervising the placement of 288 delicate, diaphanous metal forms not on a wall but hanging from a 41-ft. ceiling with the aid of four rented scissor lifts, a team of installers, layout instructions in the form of a floor plan and a 3D rendering, and a lot of filigree thread.

Complicating things is that the artist is not present. This is excusable because he is 80, lives in Ghana, has had work unveiled in more than 20 exhibitions this year in cities as far-flung geographically and culturally as Shanghai, London, Dubai, and Lagos, and is quite possibly the most in-demand visual artist alive today.

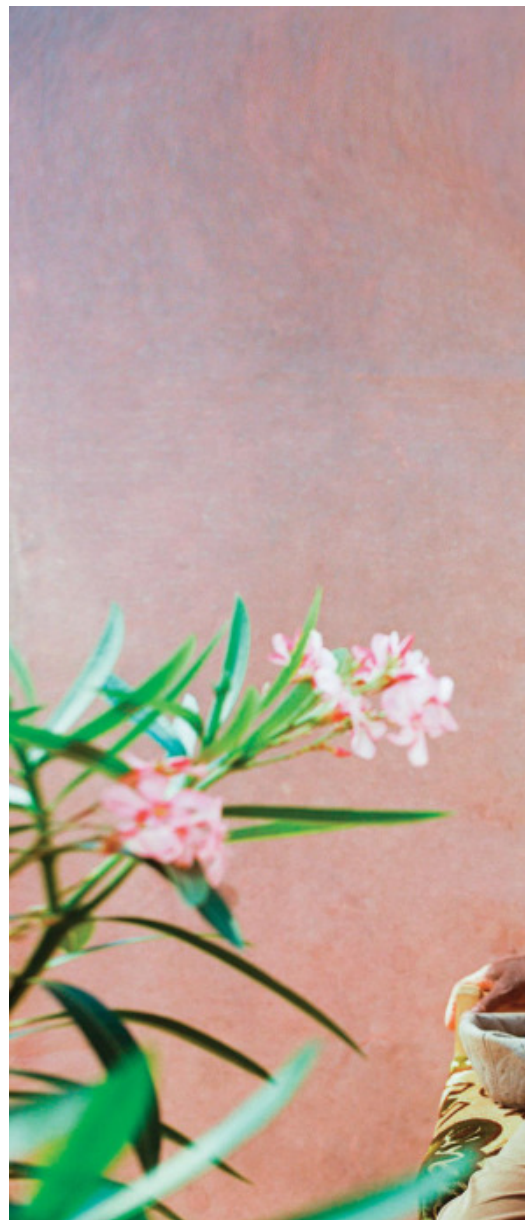
Rarely has a cultural figure had such transcontinental acclaim as El Anatsui, the creator of the Philadelphia museum’s newly commissioned work. His success is even more unusual because he’s based in Africa, which lacks the East’s and the West’s well-resourced mechanisms for promulgating their creations. But Anatsui often talks about his art in terms of the “nonfixed form,” a reference to both the literal malleability of his monumental works and their adaptability to the space—and culture—in which they are placed. His art is as resonant in Singapore as it is in Switzerland.

Anatsui’s most famous artworks, colossal wall hangings made of linked-up tiny pieces of metal, defy easy categorization. Cascading draperies of color and contour, they have the visual drama of paintings, the pixelation of mosaics, the complexity of weaving, the curves of sculpture, and the grandeur of architecture. “They don’t quite look like anything that people have seen before,” says Nairne. “His work feels so unusual and dynamic as a material experiment.”

Most people have settled on describing them as tapestries or quilts, partly because those are the closest things the Western art traditions have to his giant, supple swaths, and partly because the amount of close-up handiwork that goes into making them is similar. Instead of thread and cloth, however, Anatsui uses the metal lids and neck coverings of liquor and other drink bottles, which are flattened and twisted into various shapes, and then linked together with wire. Bottle caps, Anatsui has observed, “have more versatility than canvas and oil.” He has spent decades experimenting with their capacities.

For the work in Philadelphia, Anatsui is trying something different. Rather than one gargantuan aluminum waterfall, he’s twisted the metal security seals from bottle necks into a material more like a net, which has then been cut into ghostly shapes and suspended from the ceiling, so

>  
*El Anatsui, 80, insists he’s not recycling; he’s transforming bottle caps “into different dimensions, into spiritual props”*



that from some vantage points they look random, from others they look like a milling crowd, and from others they cohere into a unified whole. “He abandoned the wall. And in doing that, and stepping out into this void, he’s creating something that feels very exhilarating,” says Nairne. “And when we see a person who is an octogenarian doing that, that feels especially exciting.”

**FAMOUSLY, ANATSUI ALMOST** literally stumbled across the idea of using bottle tops when he found a discarded bag of them on the road in Nigeria in 1998. It lay around his studio for two years while he continued to experiment with other discarded





Anatsui, the youngest of 32 children, grew up surrounded by people doing such repetitive and ultimately meditative work as weaving and mending nets. When his mother died, he was sent to live with an uncle who was a Presbyterian minister, and from there to study sculpture at an art school that largely revered the Western canon. But Ghana was gaining its independence from Britain during Anatsui's formative years, and he became interested in Ghanaian music and culture. Throughout his work there's a sense of reclaiming, a notion of rediscovering and reincarnating that which is local.

**HENCE THE BOTTLE CAPS:** they're cheap, abundant, brightly colored, and a staple of the landscape. Equally importantly, they are loaded with history. Anatsui often refers to the cycle of trade that ultimately brought so many of the caps to his environment: that Africans were taken by force through Ghana to labor in the plantations to produce sugar and rum that was shipped to Europe and then sent to Africa. "The drink represented here by bottle caps links all three continents," he has noted.

In 1975, Anatsui got a job teaching at the first Indigenous university in Nigeria, in Nsukka, and set up a studio there. His sheets, as he calls them, came to Western attention largely through a 2002 exhibition in Llandudno, Wales, that was so popular it traveled to nine other places in Europe and the U.S. By 2007, he earned the Golden Lion for lifetime achievement at the Venice Art Biennale. As his fame, and prices, started to grow, he employed local townspeople and students in Nsukka to help him keep up with the supply chain and the handiwork.

In 2021, he built a much bigger facility near Accra, and now has operations in both countries, gathering and preparing many of his bottle tops in Nigeria and assembling the works in Ghana. "A whole generation of West African artists and creatives stand on El Anatsui's shoulders, partly through his groundbreaking works, but partly through his model of always giving back to the communities that formed him," says Lesley Lokko, the Ghanaian Scottish architect who is founder of the African Futures Institute, and was the director of the 2023 Venice Architecture Biennale.

Anatsui's community-based, organic way of working has enabled him to have a much wider reach than artists who make work on their own. But it's also key to the organic nature of his practice. He doesn't usually sketch his designs in advance, "I let the material lead me," he has said. "If it can't say something, then it better not be made to say it." After all, he once noted, "trees grow without a blueprint." And he likes to give curators like Nairne the freedom to add their own input in how a finished piece should be installed.

Not being at the museum to supervise (except sometimes via Zoom) is fine with him. Anatsui is not overly—precious. He likes the way each human hand makes things a little differently. "As an artist I have to decide how to harvest those differences into something organic," he has said. Each piece reflects the accumulation of the unique abilities of each local craftsman who touched it—from Accra to Philadelphia.

materials, including the cheap wooden trays locals used to display fruit at a market, disks from opened cans, and wooden pestles, doors, and window frames. He also worked with pot fragments, grinding them up to make the raw material for new clay that he adds to clay fresh from the earth. "Life is not a fixed thing," he has said. "It is something that is in constant flux. And therefore I want my artworks to have some element of that in them."

It's possible Anatsui's facility for gathering what he needs and then working with it was forged during his upbringing in Anyako, a fishing community that juts into the Keta Lagoon near the border with Togo. His father was a weaver and a fisherman, and

**'Trees  
grow  
without a  
blueprint.'**

—EL ANATSUI



The Price sisters (Doupe, left, and Petticrew, center) face the consequences

## REVIEW

## Say Nothing speaks volumes

BY JUDY BERMAN

IN 1972, AT THE BLOODY HEIGHT OF the Troubles, home invaders abducted a widowed mother of 10 named Jean McConville from her Belfast apartment. Her children never saw her alive again. The family spent decades demanding answers from the Irish Republican Army, which was known to have “disappeared” fellow Catholics at the time, as to what had become of McConville and why—a quest that propels Patrick Radden Keefe’s acclaimed 2018 book, *Say Nothing: A True Story of Murder and Memory in Northern Ireland*. Now the best seller has been adapted into an exceptional nine-episode FX miniseries, also titled *Say Nothing*, that resonates not only as a gripping true-crime drama, but also as an urgently timely work of political art.

While the mystery of McConville’s disappearance gives the narrative shape, Keefe (an executive producer) and creator Joshua Zetumer weave several related stories into a profound meditation on radicalism, regret, and the complicated legacy of the Troubles. From a distance, we observe the rise of Gerry Adams, who would become the longtime leader of Irish republican party Sinn Féin. Though an

onscreen disclaimer dutifully notes that he has always denied having been an IRA member or participated in its attacks, the show’s version of a cut-throat young Gerry (Josh Finan) masterminds bombings and orders the deaths of compromised comrades.

But the core of *Say Nothing*, streaming in full on Hulu as of Nov. 14, is the story of Dolours Price, portrayed as a young woman by Belfast native Lola Petticrew and in middle age by Maxine Peake, in a pair of indelible performances. Raised by Catholics who had been jailed and maimed for the republican cause, brilliant firebrand Dolours and her quieter but, as it turns out, more militant sister Marian (Hazel Doupe), briefly explore nonviolence in the ’60s; the strategy yields only beatings at the hands of Protestant cops. The Price girls soon volunteer for the Belfast branch of the IRA, refusing the helpmate duties of their mother’s generation in favor of frontline action. In one madcap sequence, early in the series, they hold up a bank disguised as nuns.

A less glamorous aspect of Dolours’ IRA career involves driving traitors

and other locals judged to be liabilities across the border to Ireland proper, where she knows that her confederates will execute them. Too perceptive, perhaps, for her own good, she remains conflicted about this particular form of violence. “I just didn’t think my contribution to this war would be killing Catholics,” she says. Barely out of her teens, Dolours harbors a burning desire to attack London and instill in Northern Ireland’s English overlords the same fear she and her family have always felt.

**A DISPUTED BORDER.** A generations-spanning conflict layered in land, identity, and faith. The downtrodden population of one side resists the military occupation of the wealthier overlord, but endures the bulk of the carnage. Questions of war vs. insurgency, freedom fighter vs. terrorist, the ethics of either side’s making civilians collateral damage for the sake of what they see as justice. The Troubles seem more than a little relevant to the tragedy now playing out in Gaza; earlier this year, Ireland recognized a Palestinian state, and Irish artists like Nicola Coughlan and Sally Rooney have criticized the Israeli government. Without sacrificing the specificity of Dolours’ story, *Say Nothing* captures the moral, ideological, and emotional complexity of such struggles, past and present.

At a moment when extreme positions prevail, some might bristle at the grace the show gives to its protagonist. An episode that has the frenetic intensity of an espionage thriller positions her as the canny yet nervous ringleader of a band of teens planting car bombs. But then it progresses through the next four decades’ worth of history, structured by the older Dolours’ candid interview for a confidential Belfast oral-history project. And as her story becomes increasingly intertwined with the McConvilles’ search for the truth about Jean and with Gerry’s use of power to escape accountability, the series leaves the impression that life is long. No matter the merits of their cause, a young revolutionary with a conscience will grow up to be a person haunted by the very worst things they did in service of it. □

**An urgently  
timely work  
of political art**





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## **Zak Brown** The McLaren Racing CEO on Formula One in the U.S., his team's chase for a championship, and the future propulsion of the automobile

**The McLaren F1 team is in the running for its first Formula One constructors' championship since 1998. What's that like?** I'm kind of living on the edge of my seat. That's why sport is always going to be one of the most engaging forms of entertainment for people around the world.

**Are you sleeping all right, or is your mind racing with all this stuff?** Mind racing, but that's not new. I've been like that for 30-plus years, because I've always been fighting for a championship. That's how business feels to me; this one's just public in front of hundreds of millions of people.

**There's been outstanding growth for F1 in the U.S., but other sports still dwarf the audience. What has to happen for that growth to continue?** We've just got to keep doing what we're doing. I don't think we need more races. We're a new phenomenon in North America, and we need just more time. I think the Brad Pitt movie [*F1*, set for 2025] will move the needle—because who doesn't want to be Brad Pitt as a Formula One driver? Just like everyone wanted to be a fighter pilot after *Top Gun*, right?

**What kind of leadership skills do you think you need in your position that are unique to F1?** The skills are kind of no different than, say, my old company [JMI, a motor-sports marketing agency]. Get yourself surrounded with great people. Be a good listener. Empower people. Be clear on goals. I think that's kind of like CEO 101. Maybe what's different is everyone knows my business, often at the same time I do. They see the pit stop when I see the pit stop; they see the race results when I see the race results.

**Do you remember the moment you first fell in love with auto racing?**

The 1981 Long Beach Grand Prix Formula One race. I didn't know anything about racing. I was 10 years old—but to see a bunch of Formula One cars ripping around the streets of Long Beach, the sound, the speed, the size of the crowd, the technology of the cars, was just insane. I still have the racing program.



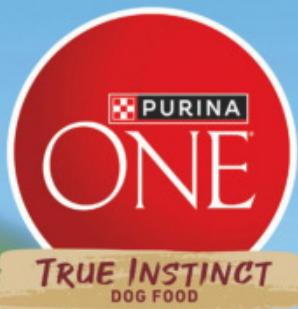
**Bianca Bustamante, the first woman in your driver-development program, has a huge following. How far do you think she'll go?** I don't think she's a future Formula One driver, because you've got to be one of the best 20 in the world, and I don't think she's demonstrated that level—not to say she's a bad racing driver at all. I think she can definitely have a great career.

**What's the biggest tech innovation in F1 that we might see in the next few years that you're excited about?** The combination of hybrid technology, which we've had for 10 years; battery technology, which we're continuing to develop; and sustainable fuels. That's what's going to be the future propulsion of the automobile. And I think that Formula One's always been an R&D lab.

**Can F1 be sustainable, given the travel and everything else?** I think it definitely can, and I think it will be, [but] you hit the nail on the head as to our single largest challenge, which is, we're a global sport. We're in [21] countries. There's what Formula One can do, what the racing teams can do, but we also are going to need our supply chain, if you like, like the airline industry, to lean in.

**What's the biggest challenge facing F1?** Just the state of the world. It doesn't mean we're perfect, [but] there's nothing that's keeping me up at night that I feel is in our control, any icebergs ahead where I'm saying, "Steer left." Our big revenue stream is our fan base and our partner base, and what impacts those groups is world economies and wars and things of that nature. But I can't control any of that. That's not a Formula One problem. That's an issue for all of us. —SEAN GREGORY





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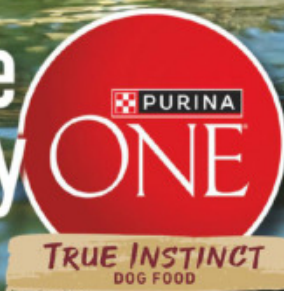
HEALTHY ENERGY

DAY 28

STRONG MUSCLES



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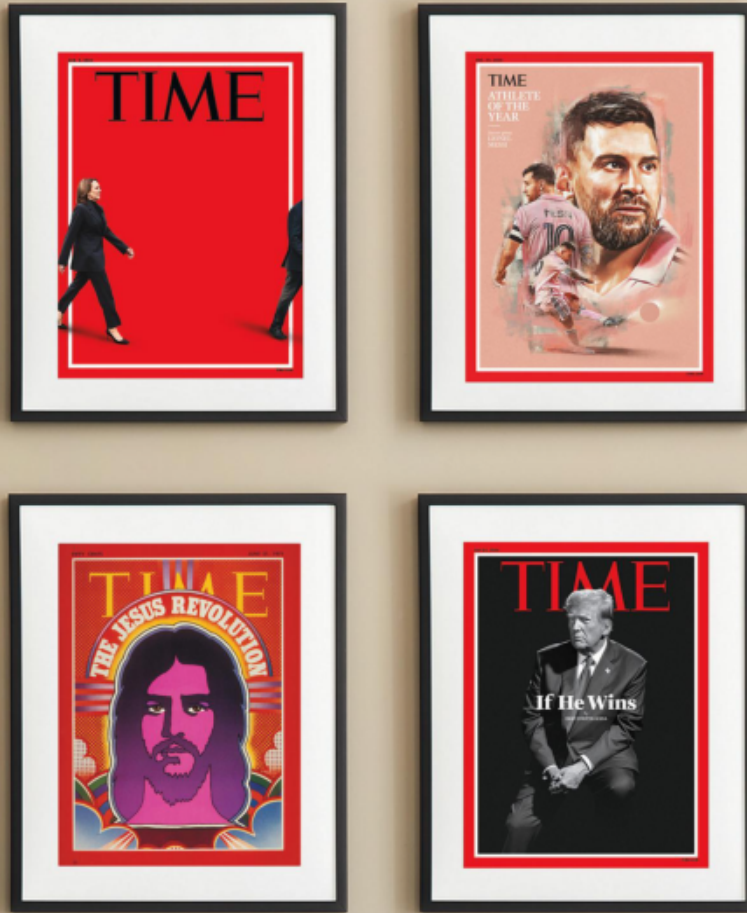


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